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ORIGINAL ARTICLES.

THE CAUSES OF ASTHENOPIA.*

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EVER since the invention of the ophthalmoscope and the discovery of hypermetropia and astigmatism, the profession has been often agitated in certain parts by the discussion of the causes of asthenopia. Like many other great discoverers, Donders remained unaware of the magnitude of his own work, perhaps until the date of his death, but thought he discovered in hypermetropia the source of nearly every form of asthenopia. He grudgingly admitted that there might be what is termed muscular asthenopia, but the general tenor of his treatise indicates a practical familiarity with accommodative asthenopia only. As has been often demonstrated, he found the profession ignorant of the true source of a large percentage of the cases of asthenopia, and busily and blindly engaged in cutting muscles for its relief. Although he discovered the existence of astigmatism, he seems not to have been aware of the widespread occurrence of this defect, and certainly he did not at all comprehend its importance in the production of asthenopia. It has been reserved for the later generation to demonstrate this. My thesis is that asthenopia is the result of ametropia, so far as it depends upon the refraction—not merely of hypermetropia, which is a large factor in the production of the train of symptoms that we group together under the term asthenopia, but also of astigmatism, chiefly hypermetropic astigmatism. While myopia plays some part in the production in a limited number of cases of asthenopia, it has no such importance as hypermetropia and hypermetropic and mixed astigmatism. Myopes are not usually asthenopic. I utterly discard muscular asthenopia, and regard it as a term founded upon insufficient knowledge of the real causes of the inability to continue to use the eyes. I attach no importance whatever to the measurement of the power of the muscles of the eye, in the same or in different individuals, except as a matter of unimportant physiological investigation, or as a means of noting what have been the evil effects of ametropia.

*Read at the meeting of the Medical Society of the State of New York, February, 1891.

After years of investigation of the large class of asthenopic cases that come to the ordinary ophthalmologist—probably at least forty per cent. of all the cases presented to him—I find, after a fair trial of prisms and tenotomies for insufficiencies, that complete correction of the refractive errors is the only means of satisfactory results. For a number of years I was in the habit of thoroughly using atropine to relax the accommodation, and although its use was temporarily unpleasant to the patient, annoying and trying to the practitioner, I found that there was no substitute for it, and that I must get the accommodation fully relaxed before I could determine the exact condition of the refraction.

While active in this kind of practice, I became familiar with the perfected ophthalmometer which Javal, after years of hard work in conjunction with his assistants, finally presented to the profession, having been stimulated to the study of ophthalmometry by Helmholtz, who invented an ophthalmometer that could only be used in the laboratory. I found in it a means of determining the astigmatism absolutely, without atropine, and, at one swoop, all my difficulties from the enforced use of atropine vanished. The relief and the exactness now afforded me in my practice are simply incalculable. Once having demonstrated the cure of astigmatism the rest became easy. Fortified by my previous experience of the inutility of the measurement of the strength of ocular muscles, I have been enabled to continue my work with a satisfaction hitherto unknown. I regard the perfect ophthalmometer as an instrument second only in importance to the ophthalmoscope. I am very far from asserting that all cases of asthenopia depend alone on errors of refraction; but I do assert that they depend either upon constitutional conditions such as neurasthenia, nervous exhaustion or the like, or else upon errors of refraction, or upon the two causes combined, and that muscular insufficiencies have nothing whatever to do with them. The doctrine of reflex symptoms extending beyond the eye and the eyelids as being caused by want of muscular balance, I utterly reject.

The term asthenopia comprehends a great deal, and its definition has been enlarged by the observations and researches of the last ten years. We say a person is asthenopic when he is unable to continue to use his eyes upon very near objects for any considerable length of time. Of course it exhibits itself in such occupations as reading, writ-

ing, sewing, and the like, very prominently. The patient commences to read or sew or write, and may be able to go on for a few moments with ease and celerity, but soon, as they expressively state, a blur comes over the page, the eyes fill with tears, they wipe them away in vain, and soon find themselves compelled, on account of the pain and inconvenience, to give up their work.

This is the simple picture of asthenopia, but added to it we have learned to find certain objective conditions, the result of this impaired action of the muscles of accommodation. Reddened eyes, reddened eyelids, watery eyes, headaches, are all now recognized as results or coincidents of asthenopia. The natural inquiry is: What is the cause of this train of symptoms? In attempting to discuss this, I will first say that I dismiss from consideration, for the present, for the sake of clearness, all those cases in which the eye is actually diseased: the asthenopia resulting from inflamed eyes, inflammation of the cornea, inflammations of the humors of the retina or the nerve, are not included in the present discussion. I speak simply of the asthenopia in eyes that are sound, except as far as their refractive conditions are concerned. It is an old and a true statement, that there is no such thing as a perfect eye. The ideal eye is one in which parallel rays unite upon the retina without any effort of accommodation, without any adaptation of the ciliary muscle, when the eye is in a passive state. This is the emmetropic eye, but this eye, when we have excluded the myopes, does not exist probably in more than four per cent. of cases. The average eye is hypermetropic. When the existence of hypermetropia was discovered as a general defect by Donders, it was supposed that it was an exceptional condition, although it was known that an absolutely emmetropic eye was comparatively rare. We now know that a high degree of hypermetropia may be concealed by an effort of accommodation, and that it may never become troublesome, until patients become presbyopic. It is utterly unreasonable, therefore, from any radical standpoint, to assume that asthenopia depends exclusively on any error of refraction, when the whole world has errors of refraction, and only a small number suffer from asthenopia.

Astigmatism, which as we all know is but an exaggeration, in one meridian of the eye, of the hypermetropia or myopia that may exist in the other—astigmatism has come to the front as a factor in the causation of asthenopia. Probably the human race can tolerate less of astigmatism without asthenopia, and especially of hypermetropic astigmatism, than they can of any other ocular defect, but even here we find a great deal of tolerance to abnormal conditions; that is to say, conditions that are technically abnormal. If we were to examine a large number of people who had never suffered from asthenopia, we should find a large proportion of them hypermetropic, or having hypermetropic astigmatism. The investigations that I have made and published in this direction show this. The profession, in my opinion, has fallen into an error in seeking the causes of asthenopia too exclusively in errors of refraction, but they have made a much greater error in assuming that conditions of the muscles produced entirely by errors of refraction are causes of asthenopia. An enormous degree of energy has been expended in determining the relations of the external muscles of the eye to each other. Numerous interesting machines for the measurement of the power of these muscles have been invented—but the machines are unnecessary, because we are merely measuring a relative power; we are determining merely how much effect an error of refraction has had upon disturbing the relation of the muscles to each other. Strabismus, or squint, is a striking example of this. Whatever else causes strabismus, one of the most important factors in its etiology is the refraction. At the bottom of most cases of strabismus convergens will be found hypermetropia, or hypermetropic astigmatism, together with the unequal refraction of the two eyes. Whenever it is possible to secure binocular vision by glasses, it is often very easy to correct the strabismus without operation.

In my opinion, the matter of strabismus explains the whole subject of insufficiencies—want of coördination of the ocular muscles; that is to say, in strabismus such a marked deviation is invariably found to be associated with a decided error of refraction, and is corrected in very many cases simply by correcting the error of refraction. It is certainly proper to infer that latent insufficiencies of the muscle, latent squints if you please, are also caused by the errors of refraction—the greater includes the less. After operation for the deformity which we call strabismus, we correct the remaining insufficiency by glasses, not by prisms, but by spherical or cylindrical or spherico-cylindrical glasses as the case may require.

I conclude—

1. That errors of refraction of a decided degree may of themselves, in healthy, non-neurotic subjects, cause asthenopia.

2. Especially is this true of hypermetropic or mixed astigmatism. Asthenopia is comparatively rare in myopes.

3. Slight errors of refraction are the rule in the human race, and do not of themselves cause asthenopia.

4. Muscular insufficiencies are entirely the consequences of errors of refraction.

I have stated these four theses, referring only to the refraction of the eye, and I wish to add that neuroses, acquired and congenital, are in themselves a fruitful source of asthenopia. Neurotic people will be annoyed by a slight error of refraction. It will cause in them very many

symptoms, but it must be carefully noted that the ocular defect is only one of the innumerable things of their environment which render them unable to use their eyes, their brains, or their limbs without annoyance and trouble. A fair specimen of an acquired neurotic condition is to be found in a patient convalescing from typhoid fever or from any grave malady like this or the "grip." The physician who endeavors to alleviate the distressing symptoms of which asthenopia will form one, in such patients, by glasses or tenotomies, will find himself chasing an *ignis fatuus*, which will lead him into a bog from which he never will be extricated.

There is a vast deal of legitimate work in the relief of asthenopia, by the finding out of the exact deviation of the eye from a normal standard of refraction. But it is not the part of wisdom to seek to limit the causes of asthenopia even to fixed refractive conditions. We have learned very much since the original discoveries of Donders upon this subject, but all that we know is, I believe, a logical deduction from principles which he has laid down. So far as we have departed from these principles we have gone in error.

SOME OF THE ANOMALIES OF GONORRHŒA.

By H. N. Avery, A. M., M. D., Minneapolis, Minnesota.

UP TO the sixteenth century confusion reigned in the understanding and treatment of venereal diseases. "Villa, in 1508, confounded together the various venereal complaints" and thus continued the indiscriminate methods of treatment until the close of the eighteenth century. About this period Balfour, Bell, Swediaur, Hernandes and Ricord began to doubt the identity of gonorrhœa and syphilis, although believed in by Hunter.

Ricord, by the use of the speculum, discovered the "chancre larvæ," and thus Phillip Ricord became the "father of the modern school of venereal." This worker in the line of venereal was born in Baltimore, Md., December 10, 1800, died October 23, 1889. His father had come to the United States in 1790. In 1820 he went to Paris, and graduated in 1826. He first practised in Olivet. From 1831 to 1860 he was Surgeon-in-chief of the Hospital du Midi, now called Hospital du Ricord, Paris. He was a close and hard worker. Dr. Holmes calls him the "Voltaire of pelvic literature"—"a sceptic as to the morality of the race in general, who would have submitted Diana to treatment with his specifics, and ordered a blue pill for the vestal virgins." Ricord was a bachelor; an old friend visited him and found his room furnished with magnificent sacred paintings and a private altar in his bedroom and, seeing his friend looked somewhat amazed, "Well!" he says, "I hear and see so many unclean things during the day, that on retiring at night I like, before going to sleep, to refresh my eyes by looking round on holy objects."

At an early period, the name of gonorrhœa was given to a disease of the penis, with a flow of what was supposed to be semen, gono—sperm, reo—to flow.

The French call the same affection "blennorrhagia," or a flow of mucus, a misnomer, for the discharge consists of a flow of mucus and pus. In common language it is called "clap" by the English, from "clavises," French public shops kept by prostitutes.

Gonorrhœa, a flow of muco-pus, containing gonococci discovered by Neisser, 1879, is oftener met with in the male than the female. Its origin is unknown. Its antiquity is recorded by Moses, in Leviticus, as a "running issue out of the flesh"—time has not obliterated any of its pangs or woes, on the contrary, time seems to be adding new lesions to its modern civilization.

Some believe that gonorrhœa, with its consequent ills, is altogether more dangerous and more pernicious than syphilis. This statement may not be so much exaggerated when we remember the diseases that follow its transmission to the fallopian tubes.

Diseases of the uterus, and its appendages resulting from it are daily met with. Women are only aware of the existence of gonorrhœa by some symptom of inflammation existing—and with its subsidence, the disease is supposed to be cured—the woman being unaware of its existence, and the physician may be misled in the secondary stage, the cylinder epithelium of the cervix being a fruitful field for gonococci. So it may be with the chancroidal poison, the presence of which may not be known, the one producing a diffused inflammation and the other a localized point, the alliance of one with the other not being sufficiently well-defined to classify them as types of the same disease.

Gonorrhœal incubation is from thirty-six hours to thirty days, the presence of which some are able to detect during copulation, by sensations somewhat persistent until the disease is fully announced by the usual discharge.

The first stage may be accompanied by an erythematous rash and fever, lasting two or three days, and subsiding with the flow of the muco-pus, when the skin will be found to be harsh and dry.

After the period of incubation has passed, ordinarily in about a week, we have the inflammatory stage, if in fact the inflammatory stage has not been set up at the time of the contact of the poison. This inflammation gradually extending from the meatus to beyond the fossæ-navicularis, and now the organ becomes sensitive with a flow of muco-pus, and possibly with blood, giving a greenish tinge to the discharge, following this stage, we have more or less pain on urination,

while the inflammatory stage produces an irritative condition of the system the reaction is followed by depression. At this stage we may have a constriction of the muscles of the under side of the penis, or cordee. We reach the third stage or period of decline, about the time painful micturition begins to abate, and the discharge may become mucus, thus continuing, indefinitely, and the discharge becomes chronic which may be known as gleet.

Hunter supposed gonorrhœa and syphilis to be identical, probably from the fact that we find a form of gonorrhœa—syphilis, where one having a secondary syphilis contracts a gonorrhœa, then we should expect to find the syphilitic poison mingled with the gonorrhœal discharge, the same as in vaccination, producing first in contagion, gonorrhœa immediately, and a chancre four or five weeks later. No doubt the virus would pass into the discharge, since we know the virus is in the blood, and finds its way into all products of inflammation.

We may have an erysipelatous urethritis without any discharge, following impure coition, this may be known as dry gonorrhœa, and may be followed by a rash over the body.

We may have another form of gonorrhœa, which I would designate as sympathetic gonorrhœa, found in those who have become conscience stricken, after coition, from fear of detection, or remorse of conscience, they imagine they feel a sensation along the urethra, continuing until the seventh or eight day of probation has passed, when to their surprise nothing remains.

Rheumatism with various structural lesions of the articulations, fibrous and muscular tissues, structural heart disease, and affections of the spinal cord, have found origin in gonorrhœa. Dr. Ollivier reports in *La Medicine Modern*, June 15, 1891, a case of gonorrhœal rheumatism in a girl five years old.

Several German writers affirm that some patients are never free from gonorrhœa after the first attack, and convey the affection as long as they live, but this is more probably the case in strumous or alcoholic subjects.

Verucca or warts may follow gonorrhœa, and these warts sometimes are very contagious.

The chronic form of gonorrhœa or gleet may be muco-purulent or mucus, and as the disease progresses they may be interchangeable and as long as there is any discharge from the urethra, there is danger of contagion. These changes in the discharge may follow imprudence in diet or habits. Some persons become sensitive to the discharge, brood over it, and thus keep the nervous system continuously on the strain, losing their appetites, thus depressing the system, followed at times by a desquamative eruption of the skin, owing probably to a sympathetic condition of the digestive organs.

Metastasis of gonorrhœa is owing probably to too heroic treatment and too early suppression of the discharge. The first attack of gonorrhœa is generally more active and persistent than subsequent ones. The eye, nose, mouth and anus, have been known to suffer from the virus. The causes of gonorrhœa in the male, are first, impure coition, and secondly, some irritating vaginal discharge. Ricord believed that a man could give himself the "clap." Fürnier says, for one case of gonorrhœa, resulting from contagion, there are at least three in which contagion, strictly speaking, plays no part; over excitement and over indulgence combined with the use of alcohol are apparently the exciting causes in such cases. Every case of gonorrhœa may not be of venereal origin, although the microscope may detect gonococci in the discharge. There appears to be no difference in the pus of specific gonorrhœa and that from simple gonorrhœa. The fact that we have a flow from the meatus does not establish the fact that we have gonorrhœa, for we may have a discharge from a chancre or a morbid growth in the urethra.

Professor Straüs records a case of gonococci detected in the urethral discharge from a boy sixteen years old, who had never had sexual intercourse, but had been masturbating since twelve years of age, two days after persistent indulging in this habit, marked symptoms of blennorrhagia set in; gonococci may exist as a simple saprophyte—by irritation may invade the epithelium and produce a characteristic catarrh.

The result of the disease in the male may be stricture, chronic cystitis, pyelitis, certain forms of tuberculous affections of the genito-urinary organs, the local irritation attracting the disease to the parts. The disease may extend to the prostate, the bladder, to the ureters, and even the kidneys. It may extend along the spermatic cord and invade the vesiculæ seminales and the testicles; there may be swelling of the lymphatics and swelling of the lymphatic glands. All cures of gonorrhœa should be watched with solicitude for metastasis.

As is well known, the mucous membrane is constantly kept irritated by its own discharge, and therefore the great tendency of prolonging the disease and discharge into gleet, which has a tendency to retard recovery by the disease lingering in some of the many crypts and follicles connected with the urethra, and even this discharge may be confounded with chronic catarrhal inflammation in the region of the prostate.

The evident cause of gleet is a prolonged suppurative inflammation, the mucous membrane at spots, loosing its healthy epithelial layer and instead presents an injected granulating pus-secreting surface, and with the contraction of this cicatricial tissue, as repair goes on, we have a diminished urethra.

GONORRHŒA IN WOMAN.

The German Surgeon Sänger has made the statement that one-ninth of all the cases coming to the gynecologist for treatment, are of gonorrhœa origin. He says, "the fact that gonorrhœa so frequently passes unrecognized in woman, the author believes to be due to a double cause, the patient herself is often unconscious of the disease, and no pathological process is apparent to point out the diagnosis to the physician." Only in recent cases, are we able to find any inflammation of the vagina, with granular swelling, injection and thickening of the mucous membrane.

The process in the hidden cases is located in the cervix. Bümm has pointed out the fact, in searching for gonococci, "the secretions from the cervix must be used, that the vaginal secretions are unsuitable for the discovery of gonococci." Dr. Martineau claims that a specific may be distinguished from a simple vaginal discharge "by using a piece of litmus paper, in the specific form, the reaction is always acid, while in the simple form it is always alkaline." Many cases of chronic catarrhal vulvo-vaginitis in children, as well as in woman, are infectious.

The condition of the disease in the two sexes differ little in their lesions, one complicating the male organ, the other the female organs and appendages.

Gonorrhœa in the female, much less common than in the male, is an inflammation of the vagina, in severe cases it may include the vulva and all the adjacent mucous membrane, and after a time, locating itself in the posterior cul-de-sac, and there lingering indefinitely, and here, hidden away, may prove the source of many cases of obscure gonorrhœa.

To this disease may be attributed many cases of intra-uterine inflammation, abscess of the fallopian tubes, ovaritis and pelvic peritonitis.

The protective tendency against gonorrhœa in woman, may be partially explained by the secretions taking place during coition, acting as a protection to the vaginal walls. And still notwithstanding this immunity more cases of specific gonorrhœa are produced in woman than in men, and woman more frequently communicate than receive gonorrhœa.

The causation of gonorrhœa, in the female, outside of gonorrhœa, may be summed up as immoderate sexual intercourse, masturbation, the presence of vegetations, syphilitic or other eruptions, errors of diet, ascarides in the rectum and the external influence of cold, chlorosis and scrofula. During pregnancy, some women will have a muco-purulent discharge, with mucus granulations similar to contagious vaginitis, the discharges from these causes will produce an inflammation of the conjunctiva and under proper conditions in the male organs of production, showing as Taylor says: "That the contagiousness of gonorrhœal matter depends upon the 'seat of origin' more than the specific poison transmitted from one individual to another." Therefore it may be essential at times for the physician to decide cautiously upon the cause of a case of gonorrhœa that seems to be surrounded by obscurity, otherwise innocent women may suffer from undue suspicion. Gonorrhœa of the uterus is usually found in the cavity of the uterus and cervix, and is of a secondary nature, secreting a tenacious transparent muco-purulent matter. Gonorrhœa of the urethra is usually accompanied by that of the vulva.

In the female urethritis we do not have the tendency to run into gleet that we do in the male, this purulent urethritis in the female is a very strong indication that the disease is of a contagious nature.

I have cured two cases of masturbation and saved the lives of two young men, by producing gonorrhœa in them. These two cases were desperate ones and required heroic treatment.

The treatment of gonorrhœa is largely empirical and, therefore, we have a catalogue full of remedies, all warranted to cure, yet disappointment is apt to follow the greatest expectations. We may divide the treatment into two methods, the abortive and symptomatic. In the inflammatory stage we may substitute a simple inflammation for the specific one. This abortive treatment of gonorrhœa will frequently leave behind a train of symptoms that may leave permanent lesions, and although some resort to nitrate of silver and other caustics, with plausable results, I do not think they are to be recommended except under urgent necessities.

The result of this abortive treatment is a desquamation of the urethral epithelium—mechanically eliminating the microbes.

We find, after the use of some of the numerous remedies given for this disease, eruptions appearing upon the body, these are sometimes confusing, and it would be well to bear in mind some of the eruptions produced by these medicines.

Arsenic—Erythema, papules, vesicles, bullæ, pustules and wheals.

Belladonna—Erythema.

The bromides—Erythema, vesicles, bullæ, pustules, papules, tubercles and wheals.

Camphor—Increased heat of skin.

Cubebs—Bright red rash.

Copaiba—Erythema, papules, vesicles, bullæ and wheals.

Cinchona derivatives—Erythema, papules, vesicles and wheals.

Chloral—Erythema, papules, vesicles and wheals.

Iodoform—Erythema, papules and vesicles.

The iodides—Erythema, papules, vesicles, pustules and wheals.

CROTON TIGLIUM AND ITS USES.*

BY ELDRIDGE C. PRICE, M. D., BALTIMORE, MD.

CROTON tiglium acts most prominently upon the mucous membrane of the intestinal tract, the whole length of the canal manifesting signs of functional perversion. This is shown in the irritated throat and esophagus, the nausea and vomiting, anorexia, pains in the stomach and abdomen, diarrhœa, etc. Many reflex symptoms also result, among which may be noted: vertigo, confusion of the head, mental depression, rapid pulse, coldness of extremities.

The skin also shows signs of disturbed function, in the appearance of an eruption, which may be a pure effect, independent of the drug's action upon the alimentary canal.

The disturbed dreams, increased perspiration and copious urinary secretion, which are found, may all be due to irritation of the digestive mucous membrane.

So far as experiments have been made we are not justified in extending the general sphere of action of croton oil beyond the mucous membrane of the digestive organs and the skin.

Unfortunately, we have no recorded post-mortem appearance in man to guide us in making an estimate of the general action of croton, but from fatal experiments upon the lower animals we are led to the belief that its effects are largely, if not entirely, due to its local irritating power.

From the foregoing general effects of croton tiglium, together with its detailed symptoms, scientific prevision should lead us to prescribe the drug under the following pathological circumstances:

Diarrhœa.—The stools are liquid, with involuntary tendency, hurrying the patient and shooting out suddenly. The discharge is copious and yellow. The stools may, however, contain mucus, in which case there is likely to be tenesmus. The discharges cause burning in the anus. There are, also, accompanying pains and rumbling in the abdomen, with a sound of splashing water therein. The pains are quite acute, being shooting, cutting and pinching.

Indigestion.—In attacks of acute indigestion croton tiglium should be studied; particularly after the indigestion of locally irritating substances. There is irritation throughout the alimentary canal; burning and scraping in the esophagus; pains, with burning pressure and sensation of fullness (one or all), in the stomach; eructations, nausea, vomiting and anorexia. Vertigo and confusion of head may also be present, with the headache principally in the front part.

As a natural result of such irritation of the intestinal canal, diarrhœa frequently supervenes upon the stomach derangement.

Cutaneous Diseases.—From the symptomatology, no very definite indications for croton can be drawn in skin troubles; but we know, however, that the drug will produce an eruption that vesiculates and finally desquamates, and that the drug will also produce a sensation of great irritation all over the body. These meagre facts, together with the well known power of croton to produce local irritation and even pustulation, render legitimate its use in eruptive diseases, including local effects of rhus toxicodendron. Croton may also be thought of in eczema.

Febrile Conditions.—The patient has a slight chill, or more probably there is merely a sensation of general coldness; a sensation of increased heat of body presents, and finally perspiration appears. Of what this febrile condition may be the precursor, we have no positive data.

General Indications.—The concomitant croton symptoms most frequently present when the drug is indicated, are, weakness (which may almost amount to exhaustion, with tendency to perspire easily), mental depression with perhaps crossness and restless sleep.

Whatever may be the morbid condition calling for croton tiglium, examination will most frequently find the primary cause of the disturbance to be in the alimentary canal. This is a legitimate inference from the pathogenesis of the drug.

* An abstract from the *Southern Journal.*

INNOCUOUSNESS OF THE MILK AND OF THE MEAT OF TUBERCULOUS COWS.

BY JOHN ARSCHAGOUNI, M. D.,
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IN THE International Congress, held in Paris, to study tuberculosis, much was said in regard to the inoculation of tuberculosis by milk supplied by dairies, particularly so when the supplying cows had tuberculous udders. Dr. Ollivier, last year, made even a communication to the Académie of Médecine on the supposed epidemic in one of the provinces where tuberculosis had been transmitted by *the milk of a cow.*

Eight days after they had to contradict this great scientific observation, notwithstanding that almost all the medical papers had spoken of it and favorably commented.

Much, also, was said about the contamination of tuberculosis by the meat of tubercular animals, more or less following doubtful experiences of laboratories.

Drs. Chauveau and Arloing, two of the experimentalists, both firmly believe in the frequent contamination by way of the digestive tract.

On the other hand, Dr. Nocard does not seem to be so convinced. He dwells on this special point that the experimental conditions are absolutely artificial and are not to be met at all in nature.

He also made experiments upon young cats, whose extreme susceptibility to the tuberculous infection is well known, and they being by nature carnivorous still more favored his experiments. He gave them meat containing the characteristic bacilli and on a *large number of experiments* he obtained negative results. We underline these words, large number of experiments, because we know that Dr. Schoull, of Tunis, also fed *two* young cats with food which was left, of which had been eaten by tuberculous patients, and he claims to have seen them contaminated, while a third cat, not partaking of that food, remained free of contamination.

Dr. Gallavardin, of Lyon, author of the "Homœopathic Treatment of Alcoholism and Criminality" under the heading of this paper, reports a case of his own, contributing to prove the innocuousness of the milk and meat of tuberculous cows.

In fact, we find, in *Lyon Medical*, the following: "Since tubercle bacilli has been found in the milk of tuberculous cows, it was thought that such milk would transmit tuberculosis. I have unknowingly, for several years, made experiments upon fifteen to eighteen persons, which seems to prove the contrary.

"I had a cow of my own for nearly ten years, giving daily up to twenty litres of an excellent milk. In her last years she gave only from seven to twelve litres of a milk almost equally good. At her twentieth year, she was unable to walk nor take food without assistance, and during the last eight or ten days she gave a milk of a very bad taste; as this occurs, I have been told, towards the end of life. I resolved to sell her to a butcher who had his slaughter-house outside of the boundaries of Lyon. Dr. Petit, appointed veterinary inspector, found a very considerable amount of tubercles upon the peritoneum, in the liver, in the kidneys, in the lungs and pleuræ.

"I asked Dr. Petit about the cow and he said she must have been tuberculous for at least a year. But she never had shown any objective symptoms of this disease. Thus, during the last year, as well as during the preceding nine years, eight to nine litres of the milk of this cow had daily been consumed, unboiled, by my ten children, by myself and my wife, besides by five or six neighbors and others.

"Finding this milk of good quality, I gave it, four years ago, to a little girl of six years old with pulmonary phthisis, prohibiting her to take meat, fish, wine and coffee, all of which are flesh losing substances, and I ordered her to take, in twenty-four hours, eight small meals of adipogene (fat making) nutriments. She thus rapidly gained flesh, the absence or disappearance of which, according to Fonsagrive, would arouse the latent phthisis and the reappearance of which will contribute to the cure of this disease, as happened in this child's case, and yet she had consumed the milk of this cow during her sickness and convalescence, she took even unboiled milk of this very cow during the last year, when the cow was certainly tuberculous, according to the statement of Dr. Petit, and yet this child did not become phthisical.

"This daily feeding of fifteen to eighteen persons and of a phthisical child with the milk of a tuberculous cow, seems to show that this milk, although containing tubercular bacilli, do not transmit this disease to those who take it, nor does it aggravate when they are infected with tuberculosis. This repeated experiment during ten years upon fifteen or eighteen persons of different origin, contradicts the assertions sustained by Drs. Ollivier and others before the Academy of Médecine on the 24th of February, 1891.

"During the past ten years that butcher's meats are, at Lyon, submitted to the examination of veterinary inspectors, it is said that the death due to phthisis is less in this city.

"In order to verify the correctness of this statement, I compared the mortality due to phthisis in Lyon of two years previous and of two years after the establishment of the rule. I compared the following years without any intentional choice at all:

Year 1876.

Total number of deaths.....9,327
Deaths by phthisis.....1,611—17 per cent.

Year 1877.

Total number of deaths.....9,106
Deaths by phthisis.....1,611—17 per cent.

Year 1887.

Total deaths.....8,885
Deaths due to phthisis.....1,605—18 per cent.

Year 1889.

Total deaths.....8,797
Deaths by phthisis.....1,527—17⅓ per cent.

"The comparative examination of those four years reveal to us that the mortality has somewhat increased, from one-half to one per cent. Should we attribute, continues Dr. Gallavardin, the result to this that, the years 1887 and 1889 have been more especially fatal for the tubercular patients than the years 1876 and 1879? or should we attribute it to the habitats and particularly that those predisposed to phthisis or infected with it consumed more meat, because they knew of the examination by the veterinary inspectors? If these classes, have for that reason consumed more meat, this could explain the slight increase in the mortality by phthisis.

"In fact, those who eat much meat, as well as the alcoholics, oftener die of this disease because they are thinning foods. This is true for the supposed tonic regimen, so highly spoken of these days, which only help the developing of certain latent diseases or hinders the cure of those already developed."

TYPHOID FEVER.

BY H. N. AVERY, M. D., MINNEAPOLIS, MINN.

WHETHER the cause of typhoid fever is the bacillus of Eberth, or some other toxine, produced from water or gas, it is an *irritative fever*.

The first thing is to diagnose the case as a case of true typhoid fever, this is not a simple matter, for it may be confounded with *acute tuberculosis, pyæmia, septicæmia, pneumonia, continued malarial, gastro-enteritis and typhus.*

If the diagnosis is conclusive that we have a *true case* of typhoid fever, then we have a *poison* in the system, working out its destruction. If we wish to treat a case successfully we must use such methods as will prevent the formation of the poison, and its elimination from the system, and treat the symptoms as they arise.

If the temperature does not run over 103°, it will hardly be necessary to use any antipyretic, but, if the temperature should go higher, then it would be necessary to use something to reduce the temperature and eliminate the poison from the system. We have nothing better than the old fashion agent, *cold water*, properly applied, either in the form of baths, coils, or sprays; especially in the first half of the disease. And to prevent the formation of the poison, Professor Teissier, shows, "that naphthol has the greatest power to prevent the formation of the *poison.*"

At the same time it is well to give water and milk freely, with chlorine water to drink, and injections of cold water may be used.

This cold water treatment externally and internally, with the "bibulous" treatment (free use of cold water and milk internally) constitutes the most powerful antipyretic treatment we have.

A STUDY OF GRAPHITES.*

BY J. T. KENT, A. M., M. D., PHILADELPHIA, PA.

IF WE begin the study of this remedy upon the outside of the body and go toward the interior, we are amazed at the external evidences of internal wrong. The general aspect of the countenance is greenish, waxy and transparent, although not dropsical, and there is a transparent appearance of the skin as when it covers œdematous cellular tissue. The skin is unhealthy; cuts do not heal but suppurate and ooze a watery fluid. Old cicatrices break open. Crusty formations occur on the skin and it seems denuded in patches oozing water. At times the lower extremities keep up a continual oozing, dripping.

Eruptions; especially on the scalp and face and bends of the limbs, between the fingers and where there are folds in the skin, as about the neck and between the nates, chafing, rawness. Eruptions behind the ears, fissured, also on the wings of the nose, in the corners of the mouth and eyes, cracking and bleeding or oozing. Wherever there is an eruption, the fluid which oozes out is gluey, honey-like, thick, tenacious. This discharge is recognized as the graphites discharge. Discharges from mucous membranes are gluey.

The skin and mucous membranes are somewhat alike in dryness. The skin is extremely dry, entire absence of sweat, dry, horny, withered, like dried beef, smoked looking, and on this account, about the knuckles it is thick, hard and horny.

Tongue dry and he must drink in order to swallow food. Mucous membranes thickened and patulous.

If we go farther into the extension of skin and mucous membranes, the hair and nails, we find the hair dry, crisp, breaks off, follicles die and it falls out in patches or becomes gray in patches the size of a quarter or half dollar.

Nails dark, black, loose, suppurating at roots, fall off, brittle, break easily; horny deposits in the quick looking like warts, elevating the nails, and are very painful.

In certain regions, as for instance the eyes, graphites produces the most vicious complaints, such as are found in the so-called scrofulous constitution. A series of pustules on the cornea one after the other, causing thickening and finally blindness; the eye is extremely sensitive to touch and light; eyelids thickened, cracked; lashes fall out; margins of lids red; canthi fissured crosswise; ectropion.

The anemic state of graphites is as marked as that of ferrum, with the predisposition to dropsy. We look to apis because it corresponds to dropsies after acute diseases, as scarlet-fever, or after an attack of malaria; but graphites is just as much to be thought of and studied as apis. Apis corresponds to dropsy after scarlet-fever in an ordinarily healthy child, graphites to the same condition in a scrofulous child, where we see the structural changes of graphites. In such a case apis might help for a time, but it is not deep enough to cure; the dropsy seems to be the same, but graphites corresponds to the constitution of the child before the fever set in. Œdema of the scrotum. Dropsies in cavities.

Another striking feature of graphites is its chlorotic state. The menses are watery, scanty, pale, late; suppressed seven or eight weeks; she is waxy, greenish, sickly looking, has greenish leucorrhœa, greenish expectoration.

There are some peculiarities about the pains of graphites, they are ameliorated by eating, or with the pains there is an awful hunger and he must eat which relieves. This relief from eating may be in colic, uterine pains, gastralgia, etc.

Here is another peculiar condition—asthmatic breathing relieved by eating. Old chronic dys-

* An abstract from the *Southern Journal.*

peptics sometimes fatten rapidly, are pale and flabby and sensitive to surrounding atmospheric conditions. There is a lack of sensation on the exterior of the body, ulcers may be probed without causing pain, eruptions on the scalp of a child may be probed and it does not cry.

Infiltration is another feature. Infiltration beneath eruptions in the skin nodules bunches, hardening. Old scars infiltrate and even malignant growths form in them. Nodules in the mammæ. This is a marked feature of this remedy. Where an old abscess of the breast has healed and in pregnancy it becomes infiltrated, hard and painful, and at the period of lactation the milk can not flow and there is threatened abscess in the old cicatrix.

Malignant growths have been ameliorated and cured by graphites. Epithelioma of the lip, wing of nose, eyelids, with infiltration.

There is a tendency to chronic diarrhœa and hemorrhage of the bowels; there is a small amount of blood passed, but a large amount of watery, reddish liquid like the washings of meat; this is common to graphites. Sour stool, curdy and sour when living on milk, as in children.

Like sulphur, graphites has great heat on top of the head, but it is generally described as being in a small spot the size of a half dollar.

Constipation; no urging; goes days without a stool; when he has a stool it is composed of little round balls knotted together with mucus like the white of egg.

Great sensitiveness of the spine; extreme sensitiveness to a jar of a bed or when walking, like thuya.

Wherever there are glands they infiltrate, indurate, enlarge and at times are painful.

CLINIQUE.

THE CASE OF PROF. EUGENE L. OATLEY.—CHRONIC EMPYEMA ENDING IN DEATH BY HEMORRHAGE THROUGH PERFORATIONS OF AN ULCERATED PLEURA LEADING INTO A COLLAPSED LUNG.—A FEW TUBERCLES UNDERGOING CHEESY DEGENERATION.

By M. O. Terry, M. D., Utica, N. Y.

ALTHOUGH a healer of the sick, it is a fact, nevertheless, that a doctor is often a painful example of the transgressions of the laws of life.

Dr. Oatley's case shows the direful truth of my statement. With a full knowledge of the destructive effects of a cold when neglected, he attends to the ills of others only to neglect his own. During the holiday season of 1890 he contracted a cold which resulted in chills and a fever, the latter of which never left him for one day until he died. The doctor continued to visit patients for weeks with a temperature of from 102 to 103 degrees.

With a family history on his father's and mother's side of phthisis, and the loss of an aunt by this bacillic disease, one would think it quite a sufficient warning; so it was, but the doctor was lost in the problems and imperative duties of his profession.

An examination of Dr. Oatley, on being brought to Utica from the Adirondacks, showed an expansion of the left lung of one and one-half inches; of the right it was but half an inch. He had a feeling of suffocation, and was distressed in breathing, respiration being superficial and rapid. The temperature mornings was often normal; in the afternoon, however, it often reached 103 degrees. The hypodermic needle and the microscope decided the question of procedure, which was immediately acted upon, when over three quarts of pus was removed by aspiration. This gave him the first night's rest he had received for weeks.

Dr. Louis Heitzmann, son of the distinguished microscopist, Dr. Chas. Heitzmann, the former making an especial study of bacteriological science, stated, in reference to the empyemic discharge: "In spite of the most vigorous search in a number of specimens I was unable to find a *single tubercule bacillus*. There were, however, a number of fat globules which retained their original color, and some of which were so broken up as to easily lead to a mistaken diagnosis of tubercle bacilli if great care is not taken. One negative examination will of course not count much where positive results have been obtained by *competent* observers, but in the pus you sent *us* no bacilli of tuberculosis whatever could be detected."

An elastic drainage-tube was kept constantly in the pleural cavity, and it was washed out on an average of twice a day by the syphonic method for six weeks, at which time a hemorrhage into the pleural cavity caused us to suspend operations for considerations. Dr. J. de Vello Moore, the attending physician, fully equipped with the wisdom of the profession gathered in this country and in Europe, had as medical counsel ex-Surgeon-General W. H. Watson and Dr. Chas. E. Chase, of Utica. The blood came entirely through the pleura; as the cavity was full it was thought best to wait for a few days for future developments, which we did. It required but a few days to make it necessary to do something with pus and blood mingling together in the cavity. It was washed out without accident and drainage re-established. The water being always tinged with blood of a disintegrated character in washing out the cavity, and the small amount of fresh blood noticed in the return water, it was deemed necessary to make a counter opening. Under ether and in the presence

of Drs. Moore, Watson and Chase, an opening was made three inches posterior to the axiliary line, between the eighth and ninth ribs. After washing out the cavity for over an hour without stopping the show of blood, it was decided to remove a portion of one rib in order to be afforded an opportunity to see, if possible, the source of the hemorrhage. Hypodermics of brandy were freely given and nutrititive enema, as the patient was very weak. He underwent it surprisingly well, and we were enabled to remove a pint of old clots, and were gratified to be able to locate the hemorrhage as coming from four small perforations widely separated from each other, leading into the right, or heretofore compressed lung. Although the cavity was kept asceptic, astringents used and remedies given best calculated to suppress the hemorrhage; ten days later another ensued, early on the morning of November 1st, which terminated a most pathetic case, and shutting off in its ending a short, brilliant career. having promises of a most flattering future.

As relatives and physicians were anxious to ascertain everything possible bearing on his case a post-mortem was held, the result of which is contained in Dr. Heitzmann's report:

"Dear Dr. Terry,—Dr. Oatley's case: In the apex of the right lung were about a dozen tubercles of hard consistency pigmented, mostly transformed into cicatricial tissue, their size nowhere exceeding that of a hemp seed; scattered throughout the lung half a dozen of tubercles, sharply circumscribed and in cheesy degeneration, their size averaging that of a pea. Near the convex surface of the lung a tubercle the size of a hickory nut, likewise in cheesy degeneration. Close above this tubercle the pleura is transformed into a dense fibrous mass, of one-third of an inch in diameter, occupying an area of three inches in circumference, gradually blending into the rest of the pleura, which is slightly thickened, moderately voscularized with granulated surface, but nowhere exhibiting tubercles either miliary or larger in size.

"The small piece of the opposite lung containing a single tubercle of a more recent date in beginning cheesy degeneration, the size of a hickory nut. The source of hemoptysis could not be ascertained in either of the pieces sent. The liver showed fatty degeneration of the lobules, as usually found in chronic ailments. Both kidneys exhibit a slight broadening of the cortex, with marked white striations; some portions with moderate hyperæmia, others pale. This is subacute catarrhal (intersticial) nephritis, usually accompanying chronic diseases.

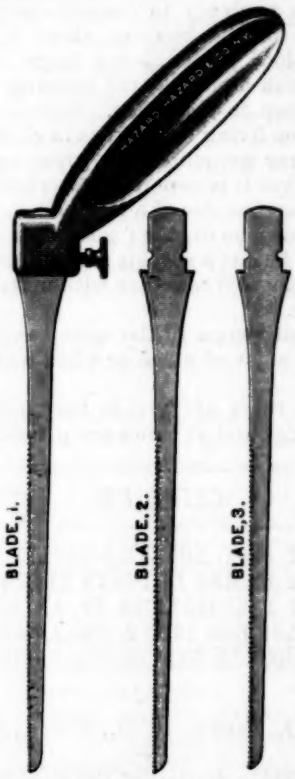
"The moderate intensity of the tuberculosis of the lungs explains the absence of tubercle bacilli in the purulent exudation of the pleura affected; this also explains the presence of the fibrinous exudation first examined (I had forgotten to mention that fibrinous sheets came away during the first two weeks after aspiration, which were sent to Dr. Heitzmann for examination). At no time was any tuberculosis of the pleura itself. The post-mortem, therefore, justifies those who denied the tuberculous nature of the pleuritis.

"Yours truly,

"DR. C. HEITZMANN."

A UNIVERSAL NASAL SAW.

AN INSTRUMENT named as above has been invented by Dr. Charles A. Bucklin, of this city, which he claims will remove the average bony deformity found in the nose, in a more practical and satisfactory manner than any other appliance. It has three reversible blades, each six inches long and containing three and a half inches of cutting teeth. The handle is of aluminum,



large enough to afford a firm hold, yet light and aseptic. Blade No. 1, as represented in the illustration, is made according to a suggestion of Dr. Bosworth, in a paper read before the Academy of Medicine several years ago. It is thin, and is furnished with cone-shaped teeth, thirty to the inch, which are perfectly erect, and hence cut equally on both sides, so as to avoid binding. In blade No. 2, which also does not bind, the teeth are thirty-two to the inch, and incline forward, so

as to cut only as the saw advances. This answers a very good purpose under several frequently occurring conditions, which might otherwise give rise to danger. Blade No. 3 is designed for exceptional conditions (peculiar formations of the turbinated bones, etc.) where it is desirable to cut only on the backward stroke. This blade may sometimes act so as to spring the nasal septum in the wrong direction, thus giving rise to the accidents above alluded to; yet without it the instrument could not be considered complete. Suitable modes of employing the different blades in particular cases will be determined by the experience of operators.

Remedy for Diphtheria.—Prof. F. H. Biggar, of Cleveland, recommends the following for diphtheria:

℞ Cyanide of mercury.....grs. ⅓
Honey.....ʒ jss.
Aqua pura.....ʒ ivss.

M. Sig. Take one teaspoonful every quarter, half or hour as may be necessary, also:

℞ Bichloride of mercury.....gr. j.
Water.....Oss.

M. Sig. Swab the throat every two hours.

In depressing the tongue use no metal tongue depressor. Cut some small sticks for the swab, use each only once and destroy immediately. Be sure and keep in glass, not allowing it to come in contact with metal. Feed patient freely with milk punch. If necessary to sustain give chininum sulph. 2x. gr. v. powder three times a day.

DIETETIC THERAPEUTICS.

Danger of Free Drinking in Cardiac Weakness.—Dr. Barr (*Provincial Medical Journal*) calls attention to the necessity for limiting the imbibition of fluids in cardiac weakness. When the heart is feeble, or there is a mechanical obstacle to the circulation, the fluid accumulates in the vessels, dilutes the blood, hydrates the tissues, lessens osmosis and increases the work of the heart by augumenting the mass of the blood. Every drop of liquid taken into the stomach must pass through the right heart, except the little that passes by the bowels, and all but that which is exhaled by the lungs must pass the left heart before it can be excreted.

Sour Milk and Buttermilk in the Nutrition of Invalids and Others.—Dr. Demuth (*Vereinsblatte Für Aerzte*) advocates the use of sour milk and buttermilk as cheap, effective, and easily assimilable nutritive agents. Both are easily digested on account of the finely divided condition of the casein and the presence of acids.

He also says that buttermilk is useful in all cases where a milk cure is indicated, and is particularly to be recommended in consumption. Sour milk has shown itself to be very beneficial in scrofulosis, neurasthenia, hypochondriasis, in convalescence, in diseases of the organs of respiration and deglutition, chronic catarrh of the air-passages, nervous disturbances following excessive or exclusive meat diet, dropsy, albuminuria and Bright's disease. It is also useful in diabetes mellitus. Both forms of milk are efficacious in chronic metallic poisoning and inflammatory and febrile conditions, especially in typhoid fever. They are not to be used in ulcerous processes in the alimentary canal, a fact not always considered in ulcer of the stomach, ulcerating cancer, and the tuberculous ulceration of the intestines.

Influence of Diet on the Growth of the Hair.—Dr. E. C. Mapother, as reported in the *British Medical Journal*, has, from certain observations on patients who have had fevers, become convinced that diet has much to do with the production and with the cure of symptomatic alopecia. Hair contains five per cent. of sulphur, and its ash twenty per cent. of silicon and ten per cent. of iron and manganese. Solutions of beef, or rather, part of it, starchy mixtures and even milk which constitute the diet of patients with influenza and other fevers, can not supply these elements, and atrophy at the root and falling of hair result. The color and strength of hair in young mammals is not attained so long as milk is their sole food. As to drugs, iron has prompt influence. The foods which most abundantly contain the above-named elements are the various albuminoids and the oat, the ash of that grain yielding twenty-two per cent. of silicon. With care, these foods are admissible in the course of febrile diseases, when albumen is the constituent suffering most by the increased metabolism. Dr. Mapother has often found a dietary composed of oatmeal and brown bread greatly promote the growth of hair, especially when the baldness was preceded by constipation and sluggish capillary circulation.

The Chemistry and Clinical Value of Sterilized Milk.—Of late years (says the *Therapeutic Gazette*) a great deal has been written upon the dangers of transmission of infection by means of milk derived from diseased animals, or improperly handled or exposed and, as a consequence, sterilization has been regarded as a necessity; but the milk, after sterilization, has been found to be so changed in that process that of late a reaction has set in, and the question has arisen whether the desired immunity could not be better attained by some other means. In the *American Journal of the Medical Sciences* for June, 1891, Professor A. R. Leeds and Dr. E. P. Davis contribute a valuable paper as to the nature of the changes effected in milk by sterilization and the clinical value of sterilized milk.

Professor Leeds is well known as an authority on the subject of milk analysis, and his conclusions are extremely interesting and valuable. Dr. Leeds finds that raising the temperature to the boiling point, and still more the retaining of it at that point for a lengthened period, as in sterilization, converts a considerable portion of the soluble into insoluble proteids. The fat globules are likewise somewhat affected by the heat, and the coagulated proteid matters attach themselves to the fat globules, and probably have an influence in bringing about the difficulty with which the fat is assimilated. Finally, milk sugar, Dr. Leeds finds, is completely destroyed by long-continued heating, and is probably affected to a certain extent during the interval ordinarily allowed for sterilization. Dr. Leeds thus shows that sterilized milk is less readily and less perfectly digestible than raw milk, and if sterile milk is sought for, the present desideratum is to obtain it either directly from the animal or by a process not accompanied by such serious drawbacks.

Dr. Davis confirms the opinion, which has gradually gained ground, that while sterilized milk may be useful as a remedy in various bowel complaints, it is not sufficient to sustain life. If sterilized milk is desired, Dr. Leeds recommends that, after being rendered feebly alkaline with lime-water, the milk should be heated to 155° F. for six minutes; or, still better, the treatment, in alkaline solution, with pancreatin at 155° F., followed, if not immediately used, by momentary heating to the boiling point. Either of these procedures, Dr. Leeds maintains, will render milk sterile without detracting from its digestibility.

Bananas as Food and Medicine.—Dr. John Dougall, of St. Mungo's College, Glasgow, has a letter in a recent issue of the *Glasgow Herald*, on the banana. He quotes from Stanley's "In Darkest Africa," showing that "for infants, persons of delicate digestion and those suffering from temporary derangements of the stomach, the flour, properly

prepared, would be of universal demand. During Stanley's two attacks of gastritis, a light gruel of this flour, mixed with milk, was the only material that could be digested." It is odd, also, as pointed out in Stanley's book, that in most banana lands—Cuba, Brazil, West Indies—the valuable properties of the banana as an easily digested and nourishing food have been much overlooked. Dr. Dougall has made some experiments in making banana flour. He concludes that it should be made from the ripe fruit at its place of production. In trying to make it from bananas purchased in Glasgow, he obtained on drying the pulp a tough sweet mass like toasted figs, an appearance probably due to the conversion of the starch into sugar. Bananas contained only about fifty per cent. of pulp, and of this about seventy-five per cent. is water. They would yield, therefore, only one-eighth part of flour.

Gastric Ulcer Cured by a Diet of Ice-Cream.—Prof. J. M. Da Costa reports, in the *Medical News* of August 8, 1891, three cases of gastric ulcer which were entirely cured under a regimen of ice-cream as the only article of diet. In the first case all foods and medicines were alike rejected. Accidentally the patient discovered that a small portion of ice-cream was not rejected when taken, and she was advised to continue this as the sole article of food. This she did for two months, taking from one to three quarts every twenty-four hours. It was retained without trouble, and all medication was stopped except that the attacks of severe pain were relieved by hypodermic injections of morphia. The patient in the meantime gained twenty-four pounds in weight, and at the end of two months other articles of food were gradually ordered until the regular diet was again taken without trouble and symptoms disappeared. In cases two and three a like result followed, in the second case the discovery also being accidental. A decided increase in weight and amelioration of all the symptoms followed in each instance, going on to complete recovery.

Prof. Da Costa says it is most likely that the ice-cream acts partly in virtue of the cold as a local anesthetic, benumbing the stomach and permitting the digestion to go on without pain. In its use too great care can not be taken to see that the cream is perfectly fresh and pure, containing no corn-starch or other ingredients to thicken it. That which is over twenty-four hours old should not be used. He thinks it may not answer in all cases, but that it will be found a most excellent article of food to use when all others are rejected. The presence of food in the stomach prevents the corrosive action of the gastric juice, and if an article of diet can be given which will allow the desired rest and at the same time nourish the patient, no special medication is often required. He thinks the chief objection to the treatment is the danger of getting impure ice-cream.

Chemical Analysis of Foods (*Jour. Am. Med. Association*).—One of the first of the artificial foods for infants was that of Liebig. It was made by a master hand, so far at least as its chemistry was concerned. It contained the exact amounts of albumin, sugar, fat and salts necessary for the nutrition of the child. But an extensive use proved that it failed in its object. The lesson which this teaches is only slowly gaining ground. That lesson is, that the animal organism requires something more for its maintenance than so much albumin, so much fat, and sugar and mineral matter. It requires that these substances shall be of such kind and in such form that they can be both digested and assimilated. The examination of the food of the properly nourished individual, shows that he requires, for instance, a given amount of proteid. Certain foods contain the proper amount of proteids. It is thereupon assumed that these foods will answer the requirements of nutrition, which does not always happen.

The various proteids certainly are available as foodstuffs, but under what conditions each is most effective as a nutrient is not known. Moreover, this question is a biological one, and, at present at least, far beyond the ability of chemistry to answer. It should, therefore, be clearly realized, that the term proteid is a purely chemical one, and gives name to a group of substances which answer the requirements of indirect, almost artificial chemical tests, and that the taking of the word in the broader biological sense and making practical application as such, is liable to terminate in disappointment, as in the Liebig instance.

Physiologists have shown conclusively that common salt is the only mineral substance, iron possibly excepted, which has a direct food value. All other so-called mineral elements are available for food only when they form constituent parts of the complex molecules of the various organic food-stuffs. For instance, it has been attempted to supply the deficiency of lime in the bones in rickets, by the administration of calcium phosphate, but without success. The animal organism is unable to build calcium phosphate into the bone tissue. It must receive the calcium and its phosphorus in some other combination. This combination, to be assimilable, must be an organic one, such as is found in the yolk of the egg, to give a single example. To destroy a cereal by heat to obtain from the ash the phosphate produced, is an illogical procedure. Identically the same products can be formed in the laboratory at much cheaper rates. The condition which made this ash available as food, was its existence in organic combination in the grain, and this availability was destroyed with the destruction of the grain.

At a meeting of the association, a few years ago, the writer heard a well-known member remark to a food manufacturer, who was demonstrating by chemical tests the large amount of albumin present in his beef extract, that it was quite immaterial how much albumin it contained, that the chemical test was worthless, that the only test of the value of his food was the clinical observation of its assimilability. This seemed at the time a little severe to the writer, who was still impressed with the equivalence of chemical and nutritive terms. To-day he can heartily endorse the observation.

It is not intended to deny that chemical analysis is of some value in assisting in the selection of foods, but one must be guided in making these analyses by a clear and full idea of their scope and their limitations. Ultimate analyses of foods are of very little use in determining the nutritive value of these substances, and are often very misleading.

Kumisgen as a Substitute for Kumyss.—This new and valuable substitute for kumyss has only of late been presented to the medical profession for its clinical test, and already the journals are teeming with citations of cases in many ailments of the alimentary tract.

Kumisgen is manufactured in the form of tablets, which have many advantages over the fluid form of kumyss, and must be laudably praised by those patients who are obliged to take kumyss as their daily nutrient.

Every physician must acknowledge to-day that kumyss is beyond question a great reconstructive, and the principal obstacle to its use more largely by the profession is the fact that it has been difficult to obtain in a uniform strength and to keep it for any length of time.

Several exhaustive experiments were made by chemists Reed and Carnrick, of New York, who were endeavoring to determine the solution of this problem. These trials resulted in the discovery of kumisgen tablets. They say that when kumisgen is prepared for use it contains every important constituent found in kumyss. It is made from fresh sweet milk, and is said to be more palatable than kumyss and always found to retain a uniform condition. The ordinary kumyss has but 15 per cent. of soluble caseine, and the kumyss which is prepared from kumisgen tablets contains 30 per cent. of this nutritious principle, caseine.

A very important point is the decreased expense as compared with other preparations of this class. A fresh preparation of kumyss can be had as desired for use. For travellers on ocean steamers and patients who visit health resorts this new chemical invention must be welcomed. Kumyss is recognized as being one of the most prominent of nutritious articles that we possess, and it occupies in our daily pharmacopœia the first place as an easily digestible food, and of service in a great variety of diseases.

The New York Medical Times.

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PREMIUMS FOR NEW SUBSCRIBERS!

THE publishers of this journal propose to make it for the interest of every physician not now a subscriber, to become such the present year, and to that end invite correspondence as to the premiums we will offer to all new subscribers!

MEDICAL STATISTICS.

THE September issue of the NEW YORK MEDICAL TIMES contained letters from two correspondents in which the statistics of the Middletown State Hospital were discussed. As those letters and the reply of Dr. Talcott through the columns of the TIMES are before the public, it will be unnecessary to quote from them here. It is pertinent, however, to show, after the matter had been fully discussed in the TIMES, why the subject was again opened in its columns. During the month of August both editors were seeking rest in the country, one in the maratime provinces of Canada and the other on his farm in New Hampshire, and the revision of proofs and the addition of items of medical news were left to an assistant. The correspondence was not seen by the editors until it was read in the September issue of the TIMES. That the letters reopened a subject which had been fully discussed and every charge frankly and squarely met, is evident from the following editorial in the March issue of the TIMES:

"In the second annual report of the State Commission in Lunacy for the year 1890, on page 67, we find a statement to the effect that 'one of the State hospitals has incorrectly proclaimed a much higher ratio of recoveries and a much lower ratio of deaths than those of any other hospital simply by estimating the percentage of recoveries on the number discharged, and the percentage of deaths on the whole number treated, methods which it need scarcely be said are calculated to show, on the one hand, the highest ratio of recoveries, and, on the other hand, to show the lowest ratio of deaths; whereas, in the other institutions these percentages are, very properly, estimated on the average daily population.' This statement, although no names are mentioned, refers to the State Hospital at Middletown, and as statistics, unless correct, are absolutely valueless, we have called the attention of Superintendent Talcott to the matter, and he has furnished us, at our request, two tables which we give below:

"TABLE No. 1.

Average Percentage of Recoveries on the Whole Number Discharged from the State Hospitals for the Acute Insane Located at UTICA, BUFFALO *and* POUGHKEEPSIE, *for the years extending from* 1888 *to* 1890, *inclusive.*

Utica State Hospital	28.94
Buffalo State Hospital	31.69
Hudson River State Hospital	30.93
General average for the above	29.48
Average Percentage of Recoveries at the Middletown State Homœopathic Hospital, for the same years	49.89

Average Percentage of Deaths on the Whole Number Treated for the same years.

Utica State Hospital	5.92
Buffalo State Hospital	6.09
Hudson River State Hospital	6.40
General average for the above	6.13
Average at the Middletown State Homœopathic Hospital for the same years	4.06

The foregoing percentages were prepared upon the method adopted at the Middletown Hospital fourteen years ago, and which has prevailed in most of the asylums in this country and in Europe the past fifty years.

It is considered to be fair and just to all parties concerned, and conclusive as to results.

TABLE No. 2.

Average Percentage of Recoveries on the Average Daily Numbers Resident in the Various Hospitals for the Acute Insane in this State for the Years 1879–1890, *inclusive.*

Utica State Hospital	19.11
Buffalo State Hospital	23 33
Hudson River State Hospital	16.00
General average for the above	19.48
Average Percentage of Recoveries at the Middletown State Homœopathic Hospital for the same years	23.83

Average Percentage of Deaths on the Average Daily Number Resident.

Utica State Hospital	9.24
Buffalo State Hospital	11.28
Hudson River State Hospital	11.58
General average for the above	10.70
Average at the Middletown State Homœopathic Hospital for the same years	6.51

The foregoing percentages were prepared after the method adopted by the State Commission in Lunacy.

In making up these tables we have gone back as far as we can in the history of this institution, and we have made comparisons with other institutions for the same periods."

In the April issue of the TIMES, in discussing the question with a valued friend whether it was wise or modest for a school claiming to be in the front rank of progress to require submission to an arbitrary creed which claims all knowledge

past, present and to come, and binds us down for all future time to a certain line of investigation, we tried to show that the so-called law of *similia* never represented the strength, the beauty and the practice of our school as a school, and said:

"The careful student of the philosophy of the New School, as taught by Hahnemann, at once recognizes that the administration of drugs is only one and not by any means the most important factor in that new philosophy, which taking nature as its teacher and guide has revolutionized the medical practice of the world. Other factors upon which Hahnemann placed even more importance than the administration of drugs, and without the observance of which drugs were comparatively useless, were physical development, the harmony of all the organs, absolute cleanliness, sunshine, pure air and water, out of which has been developed the trained nurse, the germ theory, and the antisepsis of modern time in which all now believe and practice.

"A simple incident in Hahnemann's life gives a forcible illustration of his philosophy. In his old age while living in Paris a dear friend called upon him, and with the tears coursing down his cheeks, entreated the white-haired old man to visit the child of a friend which had been given up by his physicians. On opening the door of the sick room Hahnemann uttered an exclamation of indignation. The windows were tightly closed, the curtains down, shutting out every ray of light, and the fever laden air almost stifling in its putridity. With a quick, sharp command, 'Open the windows, the air is poisonous,' he threw the blankets from the child and bathed the face with cold water. Soon the fitful breathing became more regular, the color slowly came back to the face and the film faded from the eye. Leaving a little medicine and giving positive directions Hahnemann left the room, and the child called back from the verge of death slowly recovered. Would the drug have been of any avail without the sunlight and the fresh air and the water? In the recognition of the fact made clear by the philosophy of Hahnemann, that disease was not an entity to be killed by a bludgeon or tortured into subjection, but that nature was all powerful and must be aided to do its work by agents which would harmonize rather than paralyze, the whole medical world started out of its night into that higher scientific life, in which the keynote of all future success and development in our profession was struck."

We hazard nothing in saying that the success of the State Hospital at Middletown has been secured, and maintained less by its exclusive homœopathic drug medication, however important that undoubtedly has been, than by the happy blending of all the factors which skill, enlightened judgment and the necessary supply of means could bring to bear for relief and cure. The medical staff and the trustees have been a unit in this matter. Every case has been individualized, and not only the medical treatment but the diet, the rest, the exercise and the surroundings have been utilized to bring about the desired result. What has been accomplished in Middletown has been aimed at and to a certain extent reached in other State hospitals. Our school has no monopoly of fresh air, pure water, cleanliness, judicious food and those hygienic and sanitary elements which are such essential factors in every well regulated hospital. In our November issue was an editorial on the "Drift of Scientific Thought," in which liberal extracts were given from a recent article of Dr. Chapin, of the Pennsylvania Hospital for the Insane, strongly denouncing a free use of opiates and hypnotics in insanity. The Old School in handling these cases are rapidly learning the great fact that more is accomplished in the right direction by carefully studying and utilizing the simple life giving, life controlling forces of nature than by the iron hand of restraint or the paralyzing blow of the medical bludgeon. If our State institutions for the insane are to be in reality hospitals for cure instead of almshouses, where the cost for maintenance render impossible a well regulated diet and a sanitary hygienic and medical treatment based upon a careful diagnosis and a thorough individualization of cases, the larders must be well supplied, the nurses well trained and attentive, the amusement hall well regulated even if the drug shop is not supplied with every drug in the pharmacopœia.

BEGINNING AT THE WRONG END.

WE ARE glad to see a vigorous effort is being made, in which the churches are strongly enlisted, to rescue New York, in its government, from the hands of the spoilers. The brazen effrontery of our city statesmen would be amusing were not the results so full of evil to the health and pockets of the community. A street is carefully paved, and in a short time torn up again for some improvement which should have been anticipated and provided for earlier. A new aqueduct costing millions is completed, capable of bringing to the city all the water needed for many years, but owing to a neglect to secure storage for the abundant supply in the Croton watershed,

which has been allowed to run to waste, we are, at the commencement of the winter, on the verge of a water famine whose disastrous results may be of the most serious character. There have been abundant rains during the season, so much in fact as to be equivalent to 300,000,000 of gallons a day for the entire year. The amount delivered since the new aqueduct was opened has been at no time over 165,000,000 gallons, the balance for want of storage having run off into the Hudson River. The entire city is put to serious inconvenience, life and property endangered, simply from lack of common prudence and forethought. It is a question if the matter can ever be brought home to our citizens with sufficient force to furnish a remedy until the voter for city officials is required to be a property holder. The direct tax payer, looking to his pocket and his own self-interest, would be more likely to vote for men who would govern the city with intelligence and honesty than the pauperized foreign voter. When the government of the city is entrusted to men who have themselves a property interest in its welfare, the lines of travel will be quickened, the facilities for comfortable, healthy and cheap living increased, and if this great moral movement, which is now taking hold of the matter, begins at the right end and works in the right direction, it will urge some change in the manner of electing our officials which will render it possible to have property interests fitly represented. We know the evils of our present system, and that no relief is open to us through the old lines.

THE BROMIDES IN EPILEPSY.

IN THE Old School, and to a certain extent in all schools, the bromides, generally in combination, have been looked upon, since the experiments of Brown-Sequard several years ago, as the all important remedy in epilepsy. The simple diagnosis of a case as epileptic unless directly traceable to some local cause, like womb or intestinal irritation or teething, was sure to be followed by the stereotyped prescription of the bromides and not unfrequently with only palliative effect. However important the bromides may be in certain forms of epilepsy, yet the remedy can only be looked upon as curative in only a small proportion of cases. In traumatic cases the bromides undoubtedly have a powerful action in preventing and to a certain extent checking the development of sclerosis, but not by any means the majority of cases are of traumatic origin. It is in the class of cases where sclerosis or any other positive lesion exists that surgeons have resorted to the removal of the affected part, but the operation, while it remedies the convulsions, may also produce a paralysis of corresponding muscles, so that the operation would be of doubtful utility. A careful individualization of cases would probably show these cases not of traumatic origin due to a syphilitic or tuberculous dyscrasia or some cause unknown, possibly in some and even a majority of cases to heredity. In these cases preceding the attacks, sometimes for months and others for years, there will be noticed an impaired vital force, physical degeneration unaccompanied as a general thing with any dimunition of clearness of intellect. The impaired digestion and assimilation usually met in this class of cases would point to such remedies as would be likely to increase nutrition, keeping down an excess of uric acid and preventing any intestinal irritation. The bromides, phenacetine, antipyrine and chloramide as well as belladonna would be indicated in certain nervous conditions for present relief, but probably more general benefit would be derived from cod liver oil and such elementary drugs as arsenic, ferrum, silver and gold when long continued treatment is required. Both the diet and the general habits of life should at the same time be carefully studied and every possible attention paid to hygiene.

An epileptic condition is generally easily diagnosed, but there is no disease requiring such patient study and close discrimination in selecting the remedy and forecasting the future. Unfortunately we have no specific, not even the bromides, and every case must be isolated and studied by itself.

SLEEP.

IN sleep there is, undoubtedly, to a greater or less extent, a suspension of the activity of the higher nerve centers, but it has remained for recent investigation of ptomaines and leucomaines to give a plausible theory of the way in which this suspension is accomplished. Prof. Vaughan and Novy define ptomaines as putrefaction alkaloids or transition products during the process of putrefaction. They are temporary forms through which matter passes while it is being transformed by the activity of bacterial life from the organic to the inorganic state. Complex organic substances, as muscle or brain, are broken up into less complex molecules, and so the process of chemical division goes on until the simple and well known final products, carbonic acid gas, ammonia and water result; but the variety of combinations into which an individual atom of carbon may enter

during this long series of changes is unlimited, and with each change in combination there is more or less change in nature. In one combination the atom of carbon may exist as a constituent of a highly poisonous substance, with the next combination into which it enters may be wholly inert. The leucomaines include all those basic substances which are formed in animal tissue during normal life, in contradistinction to the ptomaines or basic products of putrefaction and in chemical constitution and in other respects bear a great resemblance to the products of decomposition of the bacteria, the ptomaines and poisonous alkaloids. It is the leucomaines which constitute the tiring substance in the muscular structures after long continued action. These leucomaines, in consequence of their inate affinity for oxygen, draw it from the muscles, producing the sense of weariness after active exertion. Gautier, whose investigations have been extensive and thorough, claims that this substance, by its chemical affinity for oxygen, deoxydizes the nervous centers and thus brings about that condition of weariness which constitute sleep. These leucomaines, he thinks, have a direct neurotic action upon the brain and induce sleep by a kind of intoxication. It is the leucomaine in the brain itself which contracts its working capacity and renders a strong stimulant necessary to keep awake. Our movements become slower, thought languishes until at length a moment is reached at which our dulled perceptions fail to stimulate the brain to action and we sleep. As a rule the influence of the tiring substance on the brain is confined to those organs or cells in which it is present, and this explains the phenomena of sleep. Exner says, deep sleep is reached by imperceptible gradations from the waking stage. By watching the approach of sleep, it will be found that the circle within which ideas range grows narrower and narrower. Certain groups of ideas remain awake after others are sunk in sleep. Death is called the twin sister of sleep, and as it approaches, organ after organ ceases its activity in a prescribed order, the life or soul passing away first from that portion of the brain which is the seat of the highest spiritual activities and that which is the seat of the lower or automatic mental faculties following later. So that what is called the death struggle, which is only occasionally seen, is the result of the last ebb of muscular life and is generally without pain or even consciousness. In sleep, as in death, the organs of the highest mental activity are the first to succumb. Johannes Muller, the celebrated physiologist, defines somnambulism as partial sleep. If, says Dr. Alsberg, we consider the possibility that certain of the higher nerve centers, which have their activity suspended on the approach of sleep, gradually pass out of this state singly or in groups and renew their activity, there is little difficulty in understanding the diversity of dreams, their want of connectedness and even the terrible nightmare, whereby, in spite of all efforts, we are unable to move a limb, and have the sensation of being paralyzed. The explanation of this latter condition is that the motor nerves are still asleep while some of the nerves of thought are awake and active. The reverse of this is the case in certain forms of somnambulism. Here certain mental organs are asleep while the motor nerves are awake and capable of being set into activity by automatic nerve centers.

METHODS OF AUTHORS.

THE *Author*, "a monthly magazine to interest and help all literary workers," published in Boston, begins with its issue of November 15th, a series of interesting and instructive papers on the "Methods of Authors," which should be of interest to writers on medical subjects as well as to others.

The first article which is before us shows the great diversity of methods adopted by authors in the treatment of subjects.

We are told that "The great Plato, whose thoughts seemed to come so easy, toiled over his manuscripts, working with slow and tiresome elaboration. The opening sentence of 'The Republic' on the author's tablets was found to be written in thirteen different versions. When death called him from his labor the great philosopher was busy at his desk, 'combing, and curling, and weaving, and unweaving his writings after a variety of fashions.' Virgil was wont to pour forth a quantity of verses in the morning, which he decreased to a very small number by incessant correction and elimination. He subjected the products of his composition to a process of continual polishing and filing, much after the manner, as he said himself, of a bear licking her cubs into shape. Cicero's chief pleasure was literary work. He declared that he would willingly forego all the wealth and glory of the world to spend his time in meditation or study."

The characteristics of nationality may also be seen by the manner in which a subject is approached: "An Englishman, a Frenchman, and a German, competing for a prize offered for the best essay on the natural history of the camel, adopted each his own method of research upon

the subject. The German, providing himself with a stock of tobacco, sought the quiet solitude of his study in order to evolve from the depths of his philosophical consciousness the primitive notion of a camel. The Frenchman repaired to the nearest library, and overhauled its contents in order to collect all that other men had written upon the subject. The Englishman packed his carpet-bag and set sail for the East, that he might study the habits of the animal in its original haunts.

"The combination of these three methods is the perfection of study; but the Frenchman's method is not unknown even among Americans. Nor does it deserve the condemnation it usually receives. The man who peruses a hundred books on a subject for the purpose of writing one bestows a real benefit upon society, in case he does his work well. But some excellent work has been composed without the necessity either of research or original investigation."

Medical men will find the following not only of interest but of benefit to them: "'A man would do well to carry a pencil in his pocket, and write down the thoughts of the moment. Those that come unsought are generally the most valuable, and should be secured, because they seldom return.' This was the advice of Lord Bacon, whose example has been followed by many eminent men. Miss Martineau has recorded that Barry Cornwall's favorite method of composition was practiced when alone in a crowd. He, like Savage, also had a habit of running into a shop to write down his verses. Tom Moore's custom was to compose as he walked. He had a table in his garden, on which he wrote down his thoughts. When the weather was bad, he paced up and down his small study. It is extremely desirable that thoughts should be written as they rise in the mind, because, if they are not recorded at the time, they may never return. 'I attach so much importance to the ideas which come during the night, or in the morning,' says Gaston Plante, the electrical engineer, 'that I have always, at the head of my bed, paper and pencil suspended by a string, by the help of which I write every morning the ideas I have been able to conceive, particularly upon subjects of scientific research. I write these notes in obscurity, and decipher and develop them in the morning, pen in hand.' The philosopher Emerson took similar pains to catch a fleeting thought for, whenever he had a happy idea, he wrote it down, and when Mrs. Emerson, startled in the night by some unusual sound, cried, 'What is the matter? Are you ill?' the philosopher softly replied, 'No, my dear; only an idea.'

"George Bancroft, the historian, had a similar habit. His bedroom served also as a library. The room was spacious, and its walls were lined, above and below, with volumes. A single bed stood in the middle of the apartment, and beside the bed, paper, pencil, two wax candles, and matches; so that, like Mr. Pecksniff, Mr. Bancroft might not forget any idea that came into his mind in a wakeful moment of the night.

"Whether in town or country, Landor reflected and composed habitually while walking, and, therefore, preferred at all times to walk alone. So did Buckle. Wordsworth was accustomed to compose his verse in his solitary walks, carry it in his memory, and get wife or daughter to write it down on his return. He used to compose aloud while walking in the fields and woods.

"Several distinguished American writers have the habit of jotting a sentence, or a line or two here and there, upon a long page, and then filling up the outline thus made with persistent revision.

"With some great writers, it has been customary to do a vast amount of antecedent work before beginning their books. It is related of George Eliot that she read one thousand books before she wrote 'Daniel Deronda.'

"David Livingstone said: 'Those who have never carried a book through the press can form no idea of the amount of toil it involves. The process has increased my respect for authors a thousandfold. I think I would rather cross the African continent again than to undertake to write another book.'

"A playwright, who had written five hundred lines in three days, taunted Euripides because he had spent as much time upon five lines. 'Yes,' replied the poet, 'but your five hundred lines in three days will be forgotten, while my five will live forever.'

"It is said of one of Longfellow's poems that it was written in four weeks, but that he spent six months in correcting and cutting it down. He wrote and rewrote, and laid his work by and later revised it. He often consulted his friends about his productions before they were given to the world. Thus he sent his work out as perfect as great care and a brilliant intellect could make it.

"Emerson wrote with great care, and would not only revise his manuscript carefully, but frequently rewrite the article upon the proof-sheets.

"Lamb toiled most laboriously over his essays. These papers, which long ago took their place in the English classical language and which are replete with the most delicate fancies, were composed with the most exacting nicety, yet their

author is regarded the world over as possessed of genius of a high order.

"La Rochefoucauld was occupied for the space of fifteen years in preparing for publication his little work called 'Maximus,' rewriting many of them more than thirty times."

It will thus be seen that the most eminent and classical writers of the world ponder over their subjects, digesting, writing, rewriting, interlining, and correcting up to the last moment of publication!

Some of our medical writers should adopt the example and they will be surprised at the result! Manuscript is rushed off to the editor with even a careless *first* writing, and must be rewritten before it can be used. It is a great mistake for authors to follow such a course because they may be equal to the best work!

Advance in methods of writing will never be made so long as recklessness is followed in the manner of producing our work. We respectfully urge our writers to consider carefully what we have written upon this subject, try these methods and experience for themselves the truthfulness of what we have said.

LITHIA AND ITS USES.

THE Lithia Spring, situate in Londonderry, New Hampshire, which has become so widely and popularly known to the profession, has recently doubled its capacity for bottling this excellent mineral water, by enlarging its works at Nashua.

The writer visited both the spring and the bottling establishment the past summer, and was surprised to hear of the quantity of water which was being shipped. The profession and the public have learned to look upon this water as a specific in many ailments to which the human body is heir, hence the great demand which is made for it all over the country, New York City and Chicago being the largest distributing points.

Carbonate of lithium has long been recognized by the profession in a great variety of affections dependent upon excess of uric acid, and it must be individualized in order to be sure of success, for it can not be universally beneficial on general principles, any more than other drugs. Hence the natural waters containing lithia must be prescribed by the careful physician and not used indiscriminately!

If lithia water is used regardless of indications, there will be many failures, and the remedy will fall into disrepute.

The cases in which we have found it useful have been especially those in which the uric acid diathesis was evident.

It would be a work of supererogation to enumerate to the profession, in these days, the long list of affections to which these waters are adapted, for their sphere of action is too well known to demand the effort.

These waters are almost universally prescribed now in rheumatism of all kinds. It would be better if the cases were more carefully selected, then there would be less disappointment and fewer failures. It is not in the nature of things that all cases will be relieved, as there are many other remedies which will be found to fill the gap where lithia fails.

Lithia is not a cure-all, and should not be stamped as *quackish!* Lithia has been found of service in cardiac rheumatism when there is great soreness about the heart, mental effort causes fluttering, there may be shocks and jerks, there is increased pain on bending forward, and there is relief of heart symptoms from urinating.

The general rheumatism, including gout, to which lithia is related, is the cases in which there is stiffness, soreness, as if beaten, intense itching without eruption, and the whole body becomes puffy and flabby.

There are some well authenticated cases on record where the cure has been complete with this remedy.

It is well known that the skin and kidneys must perform their normal functions in order to have health, and these lithia waters are of the greatest service in this direction. It is to their diuretic properties that we owe so much for their service in the treatment of affections of the kidneys, bladder and urethra, particularly when caused by calculi, whether of the lithic or uric acid variety.

The clinique has not only demonstrated the solvent value of lithia waters in these greatly dreaded cases, but has shown the power to change the diathesis and permanently cure the condition upon which it depends. It has also shown that lithia in solution as Nature has provided, is practically better than any the chemist has yet made!

Hemianopsia, a symptom which lithia has the credit of removing, a frequent accompaniment of migraine and gastralgia, consists in the sudden and transitory suppression of one-half of the field of vision. During the intermission between the attacks the vision is quite normal. Its character indicates the cause to be due to a limited central ischæmia, perhaps due to uric acid. The only cases the writer has had the opportunity to observe, have occurred in patients subject to acute arthritis, with excess of uric acid, and lithia in

some form has been of great service when the concomitants admitted of its administration.

Now that lithia waters are becoming so generally used, it becomes our duty as physicians to make careful study of their effects, not only that we may the more intelligently prescribe them, but, also, that we may be able to limit their use by the public, for any agent that is equal to good is also liable to do harm if improperly used.

THE OVARIAN JUICE IN THERAPEUTICS.—In the *Archives de Physiologie Normale et Pathologique* for April, 1890, Professor Brown-Séquard continues his record of experiences with testicular juice, and adds some novel reports upon the use of injections of watery extracts of the ovaries in women. He quotes the experiments of Professor Villeneuve, of Marseilles, upon a hysterical woman, who, after a double salpingotomy continued to have crises. She was treated with injections of the ovarian juice, and cured!

Dr. Brown-Séquard adds that an American lady has been carrying on experiments with the ovarian injections with great perseverance and success. She used the ovaries of rabbits, and prepared and used the extract in the same way as was done with testicles. Experiments were made upon more than a dozen female patients suffering from debility, insomnia, and uterine troubles. She observed return of strength, relief of insomnia, cessation of hysterical attacks, and in one old lady who had lost her singing voice, a complete return of vocal power!

It is to be regretted (remarks the *Medical Record*) that the important juvenescent properties of the fresh ovaries were not known when the removal of these organs was so much in vogue in this and other cities. To have removed the ovaries, chopped them up, extracted their juice, and inoculated the patient with the dynamogenic product of her own organism would have been a superb climax of surgical and medical art.

THE following case is fully reported in the *Brooklyn Medical Journal:* Dr. Cruikshank sued a Mr. Gordon for slander, in saying "He treated my child for malaria when it had another and entirely different disease," and "he nearly killed my child, and would have killed it if another doctor had not been called in." The jury rendered a verdict for the doctor for $1,600 damages, which was confirmed by each successive court, and finally by the Supreme Court of the State of New York. In addition to the specific charge, the slanderer repeatedly stated that the doctor was generally incompetent as a physician, the most important point reached by the decision was, that the physician need not prove the damages sustained, but, the slanderous language being uttered, the damage resulting therefrom may be assumed.

ONE OF the London life insurance companies has given up medical examinations, and insures the applicant on his own certificate of health, the sole condition being that the amount of the policy shall not be paid if the insured dies within five years. In that case his heirs receive only the amount that has been paid out in premiums with interest.

AUTHORS of *original* articles, suitable for these columns, are invited to submit their manuscripts for examination with a view to publication, and the money value should be stated in each case where pay is expected.

The publishers will deal as liberally with authors as the circumstances will permit.

Payment for articles must not be expected unless the matter has been thus arranged prior to publication.

THE American Obstetrical Society will hold its next annual meeting at the New York Ophthalmic Hospital on December 15th, on which occasion interesting addresses are expected to be delivered by men eminent in this speciality.

The New York State Medical Examination.—At the first examination under the new law, which was held on the 10th, 11th, 12th, and 13th inst., the questions were as follows:

CHEMISTRY.—1. What element composes over half the matter of the earth? 2. What is oxidation? 3. What is ozone? 4. Mention a test for sugar other than Trommer's? 5. What is Fehling's solution? 6. Describe the mode of testing for albumin in urine. 7. Name the chemical constituents of biliary calculi. 8. Upon what do the bleaching and disinfecting properties of chlorine depend? 9. Define an acid, a base, and a salt. 10. Write the formula for sulphuric acid. 11. What is Paris green? 12. What is the chemical name of Rochelle salts? 13. Give the formula for mercuric chloride (corrosive sublimate) and [the formula for] mercurous chloride (calomel). 14. What is the chemical designation of the ordinary alcohol of commerce? 15. From what substance is ether obtained?

ANATOMY.—1. Give a brief anatomical description of the humerus. 2. Describe the osseous structure of the thorax and the number and general characteristics of the ribs. 3. Describe a lumbar vertebra. 4. Describe the difference between an artery and a vein. 5. Describe the three coverings of the brain and name the principal sinuses. 6. Locate and describe the urinary bladder. 7. Describe and locate the ileocæcal valve. 8. Give the number of the temporary or milk teeth and also the number of permanent teeth. 9. What are the origin and course of the pulmo-

nary artery? 10. Give the names of the principal muscles of the back. 11. Give the order from within outward of artery, vein, and nerve in Scarpa's space. 12. Describe the thoracic duct. 13. Give the gross anatomy of the liver. 14. Locate and describe the kidneys and suprarenal bodies. 15. Locate and describe the rectum.

PHYSIOLOGY AND HYGIENE.—1. How does the digested food enter the circulation of the blood? 2. What conditions within normal limits will modify the quantity of urea in the urine? 3. Give the mechanism of nerve-reflex and an example of its action. 4. Describe the functions of the liver. 5. How does respiration affect the blood? 6. Name the several digestive ferments and give the action of each. 7. Name the physical properties of pure water. 8. What are the objects of cooking food? 9. Into what general classes are foods divided? Give examples of each class. 10. How does the air of crowded rooms become foul? 11. How much space is required for a single individual in a sleeping apartment to insure health? 12. What deformities are liable to result from improperly constructed desks and seats in school-rooms? 13. Name the principal means for preventing the spread of contagious diseases. 14. Name three tests for detecting impurities in water. 15. What is the best sanitary plan for the disposal of sewage?

OBSTETRICS.—1. Describe the development of the fertilized ovum in its early stages. 2. What is to be learned by abdominal auscultation in pregnancy? 3. What changes occur in the uterus during pregnancy? 4. How is prolapse of the funis recognized and treated? 5. What is meant by inertia of the uterus during labor? How does it complicate labor and how should it be treated? 6. What signs would indicate death of the fœtus prior to labor and what should be done in such a condition. 7. What are the certain signs of pregnancy? 8. How is the perinæum endangered in labor? 9. Give the diagnosis and management of a face presentation. 10. Describe the methods of removing the placenta, and tell when they are appropriate. 11. What are the causes of hæmorrhage after labor, and what is the treatment? 12. What care does the mother require after labor? 13. Give the causes, symptoms, and treatment of asphyxia of the new-born. 14. Give the causes, symptoms, and treatment of mammary abscess in the puerperal state. 15. Describe the common varieties of the obstetric forceps and their application.

SURGERY.—1. Name the different methods by which wounds heal, and describe each. 2. What is a tumor? 3. Give the treatment of fracture of the clavicle. 4. What are the symptoms of strangulated inguinal hernia. 5. What tissues are divided in the operation for femoral hernia? 6. What are the causes of atony of the bladder? 7. Give the general treatment for the arrest of hæmorrhage. 8. How and in what part of the inferior maxillary bone is fracture most liable to occur, and what is the treatment? 9. How is a fracture produced? 10. What is a dislocation? 11. What is the treatment of simple penetrating wounds of the abdomen? 12. What is the treatment of asphyxia? 13. Where are the swelling and fluctuation most prominent in synovitis of the ankle joint? 14. What is the pathology of "white swelling"? 15. Give a description and state the characteristic symptoms of scirrhus of the mamma.

PATHOLOGY AND DIAGNOSIS.—1. Describe the eruption of typhoid fever. 2. What is endemic disease? 3. Give the symptoms of epidemic influenza. 4. What is hæmoptysis? 5. What are the normal sounds heard in inspiration and expiration? 6. Give the physical signs of pleuritic effusion. 7. What is hypertrophy? 8. What are crepitant râles? 9. How would you diagnosticate a case of diphtheria? 10. What is the normal relation of the pulse to respiration? 11. State briefly the rational and physical signs of acute bronchitis. 12. Give the clinical history of an acute attack of croupous pneumonia. 13. Describe the natural heart sounds. 14. On what day does the rash usually appear in scarlatina? 15. Give the pathology of carcinoma.

THERAPEUTICS, PRACTICE, AND MATERIA MEDICA.—*A. Questions prepared by the Board of Examiners representing the Medical Society of the State of New York:* 1. What are the therapeutic uses of ergot of rye? 2. What are the therapeutic uses of digitalis? 3. Explain the therapeutic uses of opium in dysentery. 4. What are the indications for the therapeutic uses of nux vomica or strychnine? 5. What are the therapeutic uses of potassium iodide? 6. State your treatment, including diet, of typhoid fever. 7. Describe the treatment of diabetes mellitus. 8. Give the symptoms and treatment of tetanus. 9. What is the appropriate treatment of epilepsy during a convulsive attack? 10. Give the treatment of acute croupous pneumonia. 11. Describe ergot of rye, its physiological action, and give the dose of the fluid extract. 12. Name three official preparations of digitalis, and give the dose of each. 13. Name an important alkaloid of erythroxylon and describe the purposes of its application and its effect. 14. Write a prescription containing morphine for hypodermic purposes, and state the amount to be used for an adult at each injection for the purpose of allaying local pain. 15. Give the difference between a laxative, a saline purgative, a drastic purgative, a hydragogue purgative, and a cholagogue purgative, and name examples of each.

B. Questions prepared by the Board of Medical Examiners representing the Homœopathic Medical Society of the State of New York:

1. Name five remedies frequently indicated in eczematous eruptions, and state for what form of the disease each is applicable. 2. Name two prominent remedies, with indications for their use in cystitis. 3. Give the indications of aconite, gelsemium, and baptisia in febrile conditions. 4. Name four of the chief remedies in typhoid fever, giving indications for their use. 5. Name four principal remedies for hæmorrhage, and give at least one characteristic indication for each. 6. What is the prognosis of diabetes mellitus and what its treatment? 7. Under what conditions would you give a grave prognosis in scarlatina? 8. State your treatment, including diet, of a severe case of diphtheria, also name four remedies and give their chief symptoms. 9. What is the proper treatment of pleurisy with exudation? 10. What are the causes of death in Bright's disease? 11. How does a homœopathic mother tincture differ from a fluid extract? Explain in a general way the preparation of homœopathic tinctures. 12. What are the chief preparations of opium? What doses produce the physiological effects of the drug and what doses are poisonous? 13. When giving digitalis in large doses, what should be its limitations and what are the dangers of its excessive use? 14. Differentiate between the pathogenetic effects of bryonia and cimicifuga. 15. Compare bryonia and phosphorus in chest disease.

C. Questions prepared by the Board of Medical Examiners representing the Eclectic Medical Society of the State of New York:

1. What are the therapeutical uses of nux vomica and

strychnine? 2. Under what circumstances would you prescribe aconite, belladonna, bryonia, and gelsemium? 3. What remedies dissolve the membrane of diphtheria? 4. Name three of the most reliable remedies for pulmonary hæmorrhage. 5. State the difference between a stimulant and a tonic. 6. What is the most frequent cause of valvular lesion of the heart? 7. Give the differential diagnosis between Bright's disease of the kidneys and diabetes. 8 What is the test for deciding between sunstroke and apoplexy? 9. What symptom is conclusive evidence of pneumonia? 10. What are the symptoms and treatment of poisoning by strychnine? 11. Name the properties and dose of gelsemium, aconite, and belladonna. 12. Name the properties and dose of veratum viride, digitalis, and nux vomica. 13. What are the preparations of opium and its alkaloids? 14. Name the most prominent heart stimulants? 15. What are the medicinal uses of ergot and of lobelia inflata?

In the examination in therapeutics, practice, and materia medica, the first five questions were under the head of therapeutics, the second five under that of practice, and the third five under that of materia medica. Each candidate was required to answer ten of the fifteen questions, and was not allowed to "cancel" more than two in each group.

BIBLIOGRAPHICAL.

AN ABSTRACT OF THE SYMPTOMS, WITH THE LATEST DIETETIC AMD MEDICINAL TREATMENT OF VARIOUS DISEASED CONDITIONS. THE FOOD PRODUCTS, DIGESTION AND ASSIMILATION. The new and valuable preparations manufactured by Reed & Carnrick. New York: Reed & Carnrick, 447 and 449 Greenwich Street, 1891.

This little book contains the latest thought upon the various subjects of which it treats. It embraces, substantially, a new method of treating all cases of gastric, intestinal and hepatic derangements, and as well all complications and chronic states of retrograde tissue inevitably following therefrom. A strict adherence to the suggestions and directions set forth in this book will bring, within the range of permanent relief and positive cure, many of the so-called incurable chronic cases.

This book is the result of a long series of scientific investigations and clinical tests, made by physicians, and it will be found of value to the profession.

THE THERAPEUTICAL APPLICATIONS OF PEROXIDE OF HYDROGEN (MEDICINAL) AND GLYCOZONE. By Charles Marchaud, Chemist, Graduate of the "Ecole Centrale Des Arts et Manufactures de Paris." New York, 1891.

Mr. Marchaud's monograph is worthy a place in the library of any physician who is interested in the subject of which it treats. It is a most interesting little pamphlet and its study will enable the physician to prescribe peroxide of hydrogen intelligently. A copy will be sent gratis to any physician enclosing stamp to Mr. Charles Marchaud, 10 West 4th Street, New York, and mentioning this journal.

A PRACTICAL TREATISE OF THE DISEASES OF WOMEN AND CHILDREN. By T. Gaillard Thomas, M. D., LL. D. Sixth Edition. Enlarged and Thoroughly Revised by Paul F. Mundé, M. D. Philadelphia: Lea Brothers & Co.; 1891.

Dr. Thomas' work, from the elegance of its diction and the concise, clear and practical manner in which the subjects treated were discussed, reached in its first edition a popularity seldom obtained by medical books. The fifth edition was issued ten years ago, and so great has been the advance in the diagnosis and treatment of diseases of women during the last decade, that the thorough revision made by Dr. Mundé of a work which was once considered classic in its style, has become necessary to bring it fully up to the standard of the present. Dr. Mundé has added materially to the value of the work by his own copious notes the results of an unusually large experience in hospital and general gynecological work.

ANNUAL OF THE UNIVERSAL MEDICAL SCIENCES. A Yearly Report of the Progress of the General Sanitary Sciences Throughout the World. Edited by Charles E. Sarjous and seventy associate editors, assisted by over two hundred corresponding editors, collaborators and correspondents. Illustrated with chromo lithographs, engraving and maps. In five volumes. F. A. Davis, publisher, Philadelphia.

The Annual for 1891 is the fourth of the yearly series thus far presented to the public, and in saying it is fully up to its predecessors in its condensation and its epitome of the medical literature of the Old School is the highest praise which can be given to the labor and the general fairness of those engaged in the preparation of the work. But we notice that all the editors, associate editors and collaborators are from the Old School, and it would be natural with every intention to make the Annual a full epitome of the best thoughts in medical literature, they should seek for the matter to incorporate into the Annual more from their own school to the neglect of other valuable material. We suggest to the editor that among the advance thinkers of the New School one or more might be called to assist in a work which should fitly represent the whole profession.

PTOMAINES AND LEUCOMAINES AND BACTERIAL PROTEIDES, OR THE CHEMICAL FACTORS IN THE CAUSATION OF DISEASE. By Victor C. Vaughan, Ph. D., M. D., and Frederick G. Novy, Sc., M. D., of the University of Michigan. Second Edition, Revised and Enlarged. Philadelphia: Lea Brothers & Co.; 1891.

In an extended notice of the first edition we expressed the opinion that this little work was one of the most valuable which had been given to the profession for many years. The second edition following so quickly the first show how eagerly the profession have appropriated the researches of the learned professors. The second edition includes the results of the more recent investigations.

THE GREATER DISEASES OF THE LIVER. JAUNDICE, GALL-STONES, ENLARGEMENTS, TUMORS AND CANCER, WITH THEIR TREATMENT. By J. Compton Burnett, M. D. Philadelphia: Hahnemann Publishing House; 1891.

Dr. Burnett never communicates with the public without having something interesting and valuable to say. His notes on liver troubles are made up of clinical cases, in the study and treatment of which is shown the close observation and knowledge of remedies which insure him such marked success. Among the new old remedies which are used with telling favor are the chelidenium majus and the carduus, both of which he finds frequently indicated in hepatic trouble. The short notes of Dr. Burnett are well worthy of perusal.

ALL AROUND THE YEAR 1892. Lee & Shepard, one of the most artistic publishing firms in the world, have surpassed themselves in their calendar for 1892. There are twelve cards, each representing in an exquisite design in color some appropriate idea for the month. The cards are bound together by a silk cord and a delicate silvered chain attached, the whole forming a useful and beautiful work of art most appropriate for the boudoir or library.

THE COMPARATIVE ANATOMY OF THE DOMESTICATED ANIMALS. By A. Chauveau, M. D., LL. D., Member of the Institute (Academy of Sciences); Inspector-General of Veterinary Schools in France; Professor at the Museum of Natural History, Paris. Revised and Enlarged, with the Co-operation of S. Arloing, Director of the Lyons Veterinary School, Professor of Experimental and Comparative Medicine at the Lyons Faculty of Medicine. Second English Edition Translated and Edited by George Fleming, C. B., LL. D., F. R. C. V. S. Late Principal Veterinary Surgeon of the British Army, Examiner in Anatomy for the Royal College of Veterinary Surgeons, etc., etc. With Five Hundred and Eighty-five Illustrations. New York: D. Appleton & Co., 1891. Pp. 1,084. Octavo.

This *magnum opus*, always accepted as the best on the subject of which it treats, has been revised, brought down to date, a copious index added, so that it will continue to rank first in the works of its class. As its volume indicates, it is a most elaborate and exhaustive treatise and deserves the highest encomiums, as all students of comparative anatomy will acknowledge.

A SHORT MANUAL OF ANALYTICAL CHEMISTRY, QUALITATIVE AND QUANTITATIVE, INORGANIC AND ORGANIC. Arranged on the Principle of the Course of Instruction given at the South London School of Pharmacy. By John Muter, M. A., Ph. D., F. R. S. E., F. I. C., F. C. S., Analyst to the Metropolitan Asylums Board, etc., etc. First American from the Fourth English Edition. Edited by Claude C. Hamilton, M. D., Ph. G., Professor of Analytical Chemistry in the University Medical College and the Kansas City College of Pharmacy, etc. Philadelphia: P. Blakiston, Son & Co., 1891. Pp. 206. Large Octavo.

The title of this excellent text-book sufficiently describes its scope. The text is concise and eminently practical as a working basis. The American editor has added much of value to the physician, such as, estimation of fat in milk, quantitative estimation of various ingredients of urine, etc., etc.

THE GUIDING SYMPTOMS OF OUR MATERIA MEDICA. By C. Hering, M. D. Philadelphia: Published by the Estate of Constantine Hering, 112 North Twelfth street.

This life-work of the late Dr. Hering has reached the ninth volume, ending with Stannum, so that one more volume will probably complete the series.

The work will commend itself to such practitioners as desire the CURED SYMPTOMS, together with the *characteristic* symptoms of drugs, concisely stated in a practical manner for reference and marked in a way to indicate their relative value.

Many will cry chaff where there is so much, but it is safer to have some unimportant symptoms reported than that any important ones should be omitted!

It is well known that the late Dr. Hering was a most conscientious and indefatigable worker in materia medica during most of his long life, and we sincerely trust that students of this branch of medicine, to which he devoted his life-blood, will show their appreciation of his efforts by purchasing his *opus magnum*, which ought to be of service to them, if they will study it, and cheer the heart of that devoted wife who survives the author, and has made it possible that this monument to her late husband should be completed! The admirers of the late General Grant purchased his "Memoirs" long after he had passed away, largely for the sake of making his widow financially independent, and why should not the friends of the late Dr. C. Hering, and the cause he worked so hard for, do the same thing in behalf of Mrs. Hering! Is there no appreciation of Hering's devotion to a cause which is claimed to be so dear to fourteen thousand physicians? We are inclined to believe that the matter has not been brought to their attention sufficiently by proper appeal!

Dr. Hering says in his preface, to be found in the first volume, that, "It has been my rule through life never to accept anything as true unless it came as near mathematical proof as possible in its domain of science, and, on the other hand, never to reject anything as false, unless there was stronger proof of its falsity," and the work before us has been done, so far as possible, upon the above most excellent principles.

A TREATISE ON PRACTICAL ANATOMY. For Students of Anatomy and Surgery. By Henry C. Bœnning, M. D., Lecturer on Anatomy and Surgery in the Philadelphia School of Anatomy; Demonstrator of Anatomy in the Medico-Chirurgical College; Demonstrator of Anatomy in the Philadelphia Dental College; Lecturer on Diseases of the Rectum in the Medico-Chirurgical College, etc. Illustrated with One Hundred and Ninety-eight Wood-engravings. Philadelphia: F. A. Davis, 1891. Pp. 481. Octavo.

The author has endeavored to make a book which would be eminently practical to the student of anatomy by presenting his subject in a most attractive and perfect manner.

The work is not a compilation, but is the result of practical labor and long experience in teaching. The descriptive text is from the standpoint of the student as he views the cadaver before him upon the dissecting table, hence practical and true to nature.

SAUNDERS' QUESTION COMPENDS. Essentials of Nervous Disease and Insanity. Their Symptoms and Treatment. Price, $1.00. By John C. Shaw, M. D. Philadelphia: W. B. Saunders, publisher; 1891.

The author has condensed an immense amount of information in a small space. Reference is made to leading specialists for additional information upon every subject treated. The author recommends in connection with the manual a study of Edinger's "Lectures on the Structures of the Central Nervous System," and the monograph of Dr. Browning on the "Vessels of the Brain."

THE MEDICAL NEWS VISITING LIST for 1892, published by Lea Brothers & Co., will as usual be welcome to the thousands who have availed themselves of its condensed information and excellent arrangement, for a record of daily and yearly work.

P. Blakiston, Son & Co. publish a small but very excellent manual on "Physical Diagnosis," by James Tyson, M. D.

The Literary Digest, a weekly journal published by Funk & Wagnall, commenced its fourth volume November 7th. Gleaning the ripest and newest thoughts from the world of scientific, religious and general literature, as presented in books and in quarterly, monthly, weekly and daily periodicals and journals, the *Digest* places the reader in close contact with the richest of literature and the great movements of the world. To the physician brought in contact as he is in his professional rounds with all classes of mind and every grade of intelligence, the general idea obtained of the current literature of the world in a journal like the *Digest*, saves him a great deal of time and money.

Reed & Carnrick publish in a monograph an abstract of symptoms of various diseases where their food preparations are indicated and the manner of using them. A frequent reference to the volume will often aid the physician in prescribing proper nourishment to save his patient.

Messrs. P. Blakiston, Son & Co., of Philadelphia, have issued "The Physician's Visiting List for 1892" as usual, this being the *forty-first* year of its publication.

CORRESPONDENCE.

DR. BROWN-SEQUARD AND ISOPATHY.

Drs. Brown-Sequard and d'Arsonval propose a *new* therapy,* consisting to combat the morbid manifestations of an organ, by injecting the juicy extract of that organ. Thus in cases of myxœdema, of exophthalmic goitre, or after thyroïdectomy, they propose to use the *thyroïdian juice;* in cases of Addison disease, the liquid of suprarenal capsules; in diabetes, the juice of pancreas; in cases of leucocythemia, the juice of lymphatic glands, of spleen or of marrow of bones; in cases where the muscles are flabby, thin and weak, without any existence of nervous affection, of juice extracted from muscles. The liquids extracted from glands or other organs of mammalians, without sufficient sterilization and filtration, generally always cause death in less than ten days, but rarely by septicæmia, which prove that toxic substances or those liable to become so, are furnished by the principal organs of the system. The juice extracted from sexual glands are the only exceptions and are not dangerous. The method employed by the authors is to prepare a glycerinated solution made of one-tenth of the juice, obtained by maceration of the tissue for about a half hour, adding to it three times its weight of pure officinal glycerine, then macerate for another half an hour, after adding distilled water six times the weight of the tissue juice. Filter and sterilize by CO^2 at 40 atmosphere.

Thus Dr. Onimus, of Monaco, has used, in a case of asystoly, the hypodermic injection of cardiac muscle, which made the suffocative attack disappear. Other symptoms, such as, difficulty to walk, breathlessness, general weakness, have been ameliorated by injections of extracts prepared by maceration of pieces of spinal marrow in glycerine. Similar injections have ameliorated a case of labio-glosso-laryngeal paralysis, and same results obtained in three other cases of spinal troubles, such as, transverse myelitis, chronic meningitis and ataxia in its early stage.

CAUSES OF ARTERIO-SCLEROSIS AND ARTERIAL CARDIOPATHIES, THEIR ORIGIN IN DIET AND THEIR PREVENTIVE TREATMENT.—BENEFIT BY VEGETARIAN DIET.

Dr. Huchard, of Paris, in the Congrès of Association Française pour l'Avancement des Sciences, held in Marseilles, points out that, outside of causes already known, such as, *infections:* variola, scarlatina, typhoid fever, etc., *diathesic:* gout, chronic rheumatism, syphilis, hereditary aortism, etc., *toxic* causes have also great deal to do, *i. e.*, tobacco smoking, lead poisoning, malarial, etc., and a greater cause, at which no attention was called up to this time, is the *dietetic.* In fact, excessive meat eating or high, gamy meat quite raw and of bad quality, throw in the organism a great number of ptomaines which, uncompletely eliminated, produces toxic effects, wrongly attributed up to this to heart (toxic vertigo, delirium, dyspnœa). These toxic troubles are favored by a lack of renal activity, which, holding in the general system a great number of toxic principles, may become a cause of arterio-sclerosis and of arterial cardiopathy. The rich and the citizen eat too much of meat; mostly high and gamy and not well done; the poor and the peasant eat less meat but the result is the same, because the meats they use are not fresh and thus contain a great number of ptomaines. Contrary to the opinion of Gubler, who thought that atheromatous changes were due to the abuse of vegetarian diet. Huchard thinks that the vegetarian diet is the best preservative of vascular degeneration and of arterial cardiopathies.

Thus, to those who are predisposed to it, a moderate meat diet should be recommended, *i. e.*, meat once a day and always well done and not high, gamy, plenty of vegetables and milk and milk-foods, etc.

Dr. Verneuil states also that cancer is a rare disease amongst those people who live on a vegetarian diet.

JOHN ARSCHAGOUNI, M. D.
WARD'S ISLAND HOSPITAL.

* Rev. int. de bibliogr. med.

A MOTTO FOR THE MODERN SCHOOL OF ANTISEPTICISM.

To the Editors of the NEW YORK MEDICAL TIMES:

Some time ago in glancing through Sir Walter Scott's Introduction to his "Lay of the Last Minstrel," in an edition of 1866, I came upon a quotation from Ovid which struck me as a peculiarly happy one in the sense in which he uses it. Sir Walter, in commenting upon the impossibility of fulfilling the duties of a successful barrister in conjunction with his arduous literary work, says: "It is prudent, if not absolutely necessary in a young barrister, to appear completely engrossed by his profession; however destitute of employment he may in reality be, he ought to preserve, if possible, the appearance of full occupation. He should, therefore, seem perpetually engaged among his law papers, dusting them, as it were; and, as Ovid advises the fair, *'Si nullus erit pulvis, tamen excute nullum.'*"

This he aptly translates, "If dust be none, yet brush that none away." He might have applied the advice in the same humorous way, with even more appropriateness, to the young physician, who may well appear busier than he is. With what force, moreover, the quotation applies to the modern surgeon, who has been taught to look with an absorbing intensity upon all the details of his science and art; to whom dust is dirt and dirt is germs, and a menace to his patient; whose duty it is to be overcareful, if anything; to whom an attention to details means success, as it does in all things. It is the keynote of all the advances in medicine and is seen in all the great discoveries of the day; the first and last thing to be taught the medical student.

Fifty years ago apt classical quotations in medical writings was the most natural thing, and we find the great writers using them freely.* The average doctor then was a better classical scholar than he is to-day. We are living now in a practical age, and the average doctor, while having "small Latin and less Greek," knows more medicine and the practical details of his science, and is apt to regard all show of merely ornate scholarship as the veriest pedantry. And yet a simple thought in a mother-tongue may be passed unnoticed, while the same thought in a foreign or classic dress is invested with a new interest and an increased importance.

After some ferreting, I found the passage and its connection in the first book of Ovid's "Art of Loving," and here it is:

"Utque fit, in gremium pulvis si forte puellæ
Deciderit, digitis excutiendus erit.
Et si nullus erit pulvis, tamen excute nullum:
Quælibet officio causa sit apta tuo."
Ovidii Nasonis Artis Amatoriæ Liber Primus, 149–153.

The italicised words can well stand alone. What more appropriate motto to be cut in stone over the portal of the modern hospital, through whose doors and windows the entering sunbeams show no floating dust! In whose halls and wards the gospel of cleanliness reigns supreme—white, spotless and dustless, a Mecca for the sick and suffering out of the dusty world. Once the dreaded refuge for the poor, now fast becoming the ideal asylum coveted by the

* I am reminded of a work by Dr. Chas. D. Meigs, entitled "Woman: Her Diseases and Remedies," published in 1854; a famous book in its day, now interesting to us on account of its classical learning and fanciful pathology.

rich. It is this gospel of cleanliness and carefulness, meaning and demanding so much, which has revolutionized surgery and medicine, opening out vistas of progress undreamt of fifty years ago, and showing us at every step even greater vistas. It has taught us to study and magnify the infinitely little. It has made the vegetable mold greater than the oak, the microscope greater than the telescope. The infinitely little has become the infinitely great.

Who can tell but the coming race may pierce still deeper down, and that what are now specks to us will be lumps of matter to them. Our atoms will be their molecules; their atoms the basis of a new science still.

I trust I may be pardoned in dwelling thus on what may seem an idle phrase, but which appears to me to strike the keynote of the new science which is making the world greater and happier every day. Respectfully,

EUGENE R. CORSON, M. D.

Savannah, Ga., Nov, 16, 1891.

HAVE WE A BOGUS COLLEGE IN OUR MIDST?

The following letter has come into our hands, and we publish it for the benefit of the authorities who are responsible for the existence of bogus institutions of this kind. The letter is signed by the writer and appears to be genuine:

BALTIMORE, Md., Nov. 16, 1891.

Homœopathic Institute, New York City:

Gentlemen,—Please send me catalogue. If same does not set down clearly about requirements for graduation after one course, please let me know how it can be done.

Respectfully,

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OBITUARY.

DR. P. P. WELLS, the veteran follower of Hahnemann, died from paralysis, in Brooklyn, a few days since at the age of eighty-three. Dr. Wells was a great enthusiast in his theory of medicine, a strict purist, who opposed with all his might anything which he considered an innovation of his master's theories.

He was a close student of materia medica and a careful prescriber in the line to which he confined himself.

TRANSLATIONS, GLEANINGS, ETC.

RETROSPECTIVE THERAPEUTICS.

BY ALFRED K. HILLS.

Opium Smoking in Phthisis.—Dr. John Gordon Dill, in the *Lancet* of July 11th, makes the statement that opium smoking, when done in a certain way, affords great relief to phthisical patients. "My custom," says he, "has been to soak tobacco in Battley's liquor opii sedativus, choosing this preparation because it contains all the component parts of opium in a fluid form, and to use it when it has dried. I have given this mixture in various proportions, and think a useful strength is three fluid drachms of the Battley to one ounce of tobacco; but of course it can be made much stronger than this. I usually advise the patient not to smoke just before eating, and I never in any case tell him how the tobacco is medicated. The most marked therapeutic effects of smoking opium in this way are, that it eases the cough, acts as an expectorant, and 'cuts the phlegm,' as the patient often expresses it. One poor man assured me that he had not the strength to get up in the morning until he had smoked part of a pipe to relieve his chest. The material which I have collected is not yet sufficiently large to draw any conclusion as to whether opium administered in this form has any specific effect upon the disease, although almost without exception the phthisical patients to whom I have given it have thought they derived great benefit from its use; nor has sufficient time elapsed, as I have only employed it for two years, to make sure that the improvement which has taken place in any case is permanent."

Dr. Dill adds suitable words of caution in regard to the dangers which the practice recommended involves, but is inclined to think these dangers have been exaggerated.

We are not told whether or not his patients inhale the smoke, but infer they do not. The point is a very important one in the *technique*.

Socotrine Aloe Leaves for Burns.—One of the thick aloe leaves is split in half, and the fresh inside portion is applied to the burn. The pain disappears instantly. The green juice of the plant turns violet, and all traces of the burn often disappear by the next day, except a violet tinge, which may remain for ten or twelve days.

Tobacco in Treatment of Diphtheria.—Dr. Schwitzer, in the *Province Médicale*, says that, from observation of persons who are habitual chewers of tobacco, and noting their immunity from local infectious diseases of the throat, he was led to employ it in treatment of diphtheria. It was used in the form of an alcoholic extract and an infusion. In small children the extract was painted on the diphtheritic patches once in twenty-four hours, and for adults the infusion was used as a gargle. The author has seen no bad results follow the use of tobacco, even in very young infants. He is satisfied of the favorable therapeutic action of this remedy, as it has been employed by him in sixty cases of diphtheria, and in but seven of this number were the results unsatisfactory. As a gargle, the author recommends it as being superior to any other in this disease. To make the extract equal parts of tobacco-juice and alcohol are used. At the time of the application, fifty parts of the extract are diluted with from thirty-five to forty parts of alcohol. For the infusion, two parts of tobacco leaves are used with two hundred of boiling water.

To Remove Bone Felon.—Dr. Hinton recommends the following treatment: Prepare a poultice of equal parts of powdered soap and desiccated salt (anhydrous sodium chloride) and enough balsam fir to make a mass. The mixture is applied twice daily for three days, when it will have made a hole to the bone, and "the core" is easily taken out. He has used the above in over a hundred cases with success.

Menthol in Hay Fever (Lennox Wainwright, M. R. C. S., in *Brit. Med. Journal*).—Hay fever has so many remedies that I almost hesitate to bring forward a simple remedy for relieving the nasal form of that ailment. The drug I have found most useful is menthol, and it acts best when placed in an ordinary smelling-bottle mixed with carbonate of ammonia, and used as smelling salts. Patients say all irritability disappears, and in many cases they get no return of the symptoms.

Atropine in Heart Diseases.—Dr. Cardarelli (*Norsk Magazin for Lægevidenskaben*, No. 4, 1891) has found that atropine in doses of one-half to two milligrammes (1-128th to 1-32d of a grain) injected subcutaneously removes the inhibitory influence of the pneumogastric. The pulse increases in frequency and the blood-pressure diminishes. Hence atropine is indicated in irritation of the pneumogastric. Whenever a slow pulse with dizziness, convulsions and syncope, are present, atropine is indicated.

Calomel as a Diuretic in Renal Dropsy.—Dr. Fleiner (*Hygeia*, No. 4, 1891) calls attention to the value of calomel as a diuretic in renal dropsy. The therapeutic value of calomel as a diuretic in cardiac affections is now quite generally recognized. Fürbringer, Meyjes, Nothnagel, Penzoldt, V.

Ziemssen, Lepine and others, while readily granting this, will not admit its efficaciousness in dropsy of renal origin. The writer communicates a case of grave renal dropsy dependant upon Bright's disease, where death seemed near, and where large doses of calomel (20 cgms. 3 grs.) three times daily for eight and nine days respectively, two times within three weeks, brought the dropsy to disappear after all other remedies had been found useless. The remedy had no disagreeable side-action, snatched the patient from grave danger and placed him in a relatively good condition for several weeks. Calomel may therefore be employed when the usual diuretics and heart-tonic fail. The urine itself was also influenced. Before taking calomel the urine was scanty, of high specific gravity, and with a proportionately large number of cylinders. During the diuretic action it increased rapidly in quantity, with lessened specific gravity, while the cylinders remained the same in amount. Only when the action began to wear off was the presence of cylinders in the urine difficult to demonstrate. Thus the kidneys were flushed of the products of inflammation, so that normal action was able to go on.

Antipyresis by Drinking Large Quantities of Cold Water (*Centralbl. F. Allg. Pathologie U. Path. Anatomie*, Feb. 1, 1891).—Although he is a warm advocate of the bath treatment, Prof. Cantani regards slight reductions of temperatures as preferable in many cases to the marked antipyresis produced by a cold bath. During many years he has obtained this result by letting the patient drink large quantities of cold water, and administering, at least twice daily, a large enema of some cold slightly antiseptic solution. The same method of antipyresis is not equally efficient in all cases of fever; in typhus, for example, the most marked reductions of temperature are obtained by the drinking of large amounts of cold water, whilst in typhoid, cold enteroclysms yield better results. In typhus the patient is given from five to six quarts, and sometimes even eight quarts of cold water during the twenty-four hours, and the windows of the room are kept open day and night. In some of the cases the duration of the disease was markedly shortened, the temperature in one case being reduced from 41° to 37° C. on the eighth day. In typhoid fever large quantities of cold water are introduced into the bowel, and the effect of these is supplemented by letting the patient drink as much as possible of cold water. It was found by a large number of observations that after each enteroclysm of two quarts of water the temperature fell 0.5°–0°.8 C. in the axilla, and this reduction was maintained for two, three or more hours. The water injected, which had a temperature of 11 C., was usually evacuated in ten to thirty minutes, and then had acquired a temperature of 35–37° C.

Both of the above mentioned methods of antipyresis increase the quantity of urine and diminish its specific gravity, especially the drinking of water. This proves that the cold water is absorbed in large quantities and then cools the entire body and even the blood, an effect more certainly obtained than with other hydro-therapeutic methods. Thus the internal organs which have the highest temperature during fever are cooled, the tissues are permeated and cleaned by the water and freed of ptomaines, and this takes place without disturbances of any kind, except occasionally a slight chill.

In ileo-typhus, the author has used for many years enteroclysms of two quarts of cold water (11°–12° C.) containing three, six or ten grammes of tannic acid and ten to fifty centigrammes of crystallized carbolic acid, and usually also one to two grammes of hydrochlorate of quinine. These are repeated twice daily, and their effect is sometimes astonishing. They prevent meteorism, or when it is already present, they cause it to disappear after two or three applications. The intestinal symptoms are reduced to a minimum, and the fever reduced and its duration shortened. In typhoid fever, if enteroclysis is employed at the commencement, it is possible in the majority of cases to abort the disease.

Music as a Therapeutic Agent.—Canon Harford, of London, has formed a guild for the purpose of testing systematically the influence that music may possess in the treatment of disease. The objects of the guild are set forth as follows: (1) To test by trials made in a large number of cases of illness the power of soft music to induce calmness of mind, alleviation of pain and sleep. (2) To provide a large number of musicians specially trained to sing and play the very soft music which alone should be administered to those whose nerves are weakened by illness. These musicians should be in readiness to answer promptly the summons of a physician. (3) To hire or build in a central part of London a large hall in which music shall be given throughout all hours of the day and night; this music to be conveyed by telephone attached to certain wards in each of the chief London hospitals. (4) To obtain opinions and advice respecting the classes of illness in which music is likely to be most beneficial, and to collect and record all reliable accounts respecting permanent benefit that has followed the use of music. The work of sending musicians to hospitals and infirmaries has already commenced, and it is intended to continue the experiments long enough for a definite conclusion to be arrived at as to the services which music is likely to render to the sick. Well known members of the medical profession are said to have expressed a favorable opinion of it.

Administration of Guaiacol by the Intestines.—Dr. Wm. H. Gregg (*N. Y. Med. Journal*) commends guaiacol as "certainly the most active therapeutic agent we possess at the present time for the treatment of pulmonary tuberculosis," but it must be taken, he adds, in large quantities. The stomach is remarkably intolerant of this class of remedies, he says, and hypodermic injection can be used only with strict precaution as to asepsis. "With a view of overcoming these obstacles," says the author, "it was decided to administer guaiacol by the intestines. In those cases where it has been carried out it has been proved that this method has no drawbacks. The signs that the drug has been absorbed rapidly make their appearance, and in the most characteristic manner. The patient tastes the guaiacol almost at once; the urine changes color and becomes greenish-black or blackish. The administration of guaiacol in an enema is a simple and practical method and one which consumptives themselves do not object to, and, in a word, gives such remarkable results that the therapeutical effect of the drug is carried to its highest power. One dose in twenty-four hours is sufficient."

Arsenic in Trichinosis.—Dr. W. H. Merrill reports (*N. Y. Med. Journal*) a case of trichinosis in which decided benefit appeared to result from the use of arsenic, in the form of Fowler's solution. Beginning with five drops three times a day the dose was increased three drops a day until constitutional symptoms showed themselves when it was lessened, and was again increased cautiously as circumstances indicated. The patient seemed fatally ill when the treatment was commenced, but was convalescent in twenty-five days thereafter. The author says that the use of arsenic for trichinosis has not been mentioned in any literature with which he is acquainted. His opinion is that while no wide-reaching conclusions can be drawn from a single case, yet the action of the remedy was so marked as to invite further trial.

Ouabaine for Whooping Cough.—Ouabaïne an alkaloid obtained from a plant used in East Africa as an arrow poison was tried a year or so ago as a remedy for whooping cough by Dr. Gemmell, of Glasgow, who published a report in the *British Medical Journal*. His conclusion was that it was of marked benefit in all stages of the disease. Dr. J. Lindsay Porteous, of Yonkers, N. Y., writes in the *N. Y. Medical Journal* that observing this report he

has since experimented with the drug, his experience being much the same as that of Dr. Gemmell. The alkaloid is exceedingly powerful, the standard as laid down by Gemmell being for a child under five years old, 1-1000 grain in solution every three hours. The toxic effects are marked slowing of the pulse and respiration, the latter being the one which Dr. Porteous thinks is to be particularly watched.

Science and Immortality.—From the Christmas *Century* we quote as follows from an article by Prof. Du Bois, of Yale, on "Science and Immortality:" "Mastery of self can be attained only in a world where temptation and sin are possible, where voluntary disobedience is the outcome of ignorant transgression. These are necessary to the end; not merely allowed, but designed. The purpose of such a world is plain to read. It means that not happiness here is the end for which we are to strive. That is a means to help us, to encourage us, to lead us on. Not the avoidance of pain is the end. That also is a means to warn us, to guide us, if needs be to compel us. But the great end which science itself is forced to recognize is the mastery of self through the struggle with sin and temptation, and the formation of a personality—of a character self-attained, of a spiritual influence in the midst of a universe governed by such influences which, disciplined by pain and trial, strengthened by the sweet uses of adversity, guided by reason and knowledge, voluntarily brought into accord with supreme will through the stress of sin itself—is thus made capable of co-operation with that will both here and hereafter. This is the significance of the process we observe. This alone harmonizes all the facts. For such a personality there must be a future. Such a personality belongs to the meaning of the universe. Not, therefore, the production of automatons, who may pass a few years of blissful, irresponsible ease, and then cease to be; nor the development from lower forms of an animal who can for a time explore nature, increase in power and civilization, develop a higher nature, stretch forth hands of entreaty to an unseen God, and then, just as the universe opens to his gaze, when higher possibilities and hopes, and yearnings begin to dawn, when he has grown completely out of his physical environment, and with an endowment far beyond his needs, catches glimpses of glories he can never share, and with heart filled with loving longings that can never be satisfied, sinks into a hopeless grave—such is not the end indicated by the facts. Such an end is worse than futile. It is a cruel mockery.

"But the development of a conscious, indefeasible personality,

> One soul against the flesh of all mankind,

of a spiritual energy in accord with eternal purpose, capable of co-operation and fit tool for higher things—this is an end which alone satisfies reason, science, revelation, faith, and hope. This alone is commensurate with the whole mighty process. The attainment of such a personality we begin here. So surely as we begin it has our true life begun, and opportunity must be afforded to complete the work—else is the whole process a failure. And this personality, science tells us as certainly as she can tell us anything, is not born to die."

Influence of Language on Character.—I am quite certain that if to-day France and Germany were suddenly and miraculously to interchange tongues, the two nations would shortly undergo some unlooked-for alterations. I have known several people whose superficial characteristics were quite different, according as they spoke French or English, although they were as fluent in the one as in the other. I know of one woman who is common and ill-bred as an Englishwoman, but who, when she speaks French, which she knows well, is apparently well-mannered and rather attractive. Nor, as we reflect, does this seem altogether strange when we consider how much national character has to do with the evolution of language, and how impossible exact translation is. I have heard a man say that to read or speak French made him feel gay, and that the effect of like uses of German was quieting.—*Dr. Weir Mitchell, in the Christmas Century.*

How to Keep Needles from Rusting.—Dr. Robert H. M. Dawbarn writes in the *N. Y. Medical Journal:* "For the past year I have been pleased with the results of a new plan—new to me, that is, though very probably not to others. This is simply to keep my needles in alcohol. For extreme safety against rust I use absolute alcohol; but the commercial article would probably be efficient. At least, some needles which I have kept in common alcohol for a month as an experiment are as bright as ever. Upon buying the needles I immerse them in benzine to remove grease. Then, after running them through a towel, I plunge the point (a cutting-edge hagedorn) into a bit of cork the size of a pea—to avoid dulling from jolting—and finally, with their corks, they are put and kept in a wide-mouthed, glass-stoppered bottle filled with absolute alcohol.

"After use I sew through a thick, wet soapy towel repeatedly, cleanse the eye with a thread, immerse in benzine, and finally replace in the alcohol. This is certainly an efficient disinfectant, besides being an excellent protector against rust."

The Anal Reflex.—Rossolimo says this reflex consists in a contraction of the anal sphincters in response to a stimulation of the skin and mucous membrane of the anus. It is invariably present in man in health. It can be obtained in the dog as well as in man, and Rossolimo has proved by experiments on the former that this reflex depends on the integrity of the third and fourth sacral roots. It, therefore, has its seat in cord lower than any other reflexes. To obtain the anal reflex the patient may be either standing, the operator separating the glutei, or lying on his side with the legs drawn up. The skin and mucous membrane of the anus may be stimulated by stroking with a pin, a feather, a piece of paper, or some suitable object. The reflex is shown by a contraction of the sphincter ani externus, and, if it is very strong, there is a drawing in of the whole anus, and even sometimes a contraction of the glutei. In women the testing of this reflex may be conveniently combined with a gynecological examination. The author has examined this reflex in a great many conditions, and he comes to the following conclusions: It is increased in some cases of neurasthenia, in cases of myelitis high up in the cord, and in conditions in which there is a general exaltation of sensations. It is lost in multiple neuritis affecting the sacral plexus, in some cases of tabes, and in myelitis of the lower part of the cord, and in these cases there is generally also anesthesia of the rectum, anus and urethra. It remains normal in functional derangements of the bladder, the rectum, and the sexual apparatus.

The Tetaniferous Man.—Verneuil (*Gaz. Hebdom. de Med. et de Chir.*, Feb. 14, 1891) applies this term to the individual who carries the virus of tetanus around on his person, although unaffected by the disease himself. The author discusses the causes and means of prevention of this affection from a clinical standpoint. If one considers the horse, with its secretions, excretions and surroundings, as all-capable of propagating tetanus, we can not regard as impossible infection by the secretions and excretions of man. The tetanic property of equine saliva has been demonstrated. The saliva of a human being may, for the time being, contain tetanus germs, and thus a bite from such an individual may cause tetanus. A

case is given illustrating this. The secretions and excretions are only infected by the ingesta, so that the sperm, milk and urine are never infected with the virus.

He says: "I have already admitted, and I now admit more than ever, that a surgeon who has dressed a tetanoid patient may communicate the disease to other patients. I also admit that any person whatever, but, above all, a physician whose hands have been in contact with a horse, not tetanic, but simply tetaniferous, may infect the wounds of his fellow beings, as in the cases cited. I also admit, finally, that such a man is not only dangerous to those whom he approaches, but may even give himself tetanus by auto-inoculation, either by wounding a part of the skin impregnated with the virus, as the plantar and palmar regions, or touching a wound on any part of his body with his impure hands."

Two cases follow, in which he traces the cause to a wound inflicted on the skin, which was previously infected with the tetanic virus. The bacillus of nicolaier was found in one of these cases. Three additional cases are given, with a very careful analytical study of each.

An Aid to Palpation.—Chlapowski finds that for palpation of tumors of the abdomen an excellent method is to put the patient into a well-filled bath tub. The advantages gained are several: The reflex contraction of the abdominal walls is overcome; it is very easy to change the position of the body without exertion on the part of the patient, and the pain is diminished. The author has had especially good results in determining the nature of tumors in the region of the cecum, and in mapping out infiltration due to old appendicitis. He has also been able to determine the nature of floating kidneys, splenic tumors and different new growths, where previously the contraction of the abdominal muscles had prevented satisfactory examination.

A Life Saved by Transfusion.—Transfusion has saved the life of a patient in the Pennsylvania Hospital at Philadelphia. A man was admitted suffering from a stab in the left forearm. He was very weak from loss of blood, and the operation of tying the blood vessels with ligatures and closing the wound prostrated him so completely that he failed to respond to hypodermic stimulants, and as a last resource, Dr. Scott determined on transfusion. A solution consisting of carbonate of soda and common salt, in distilled water, heated to a temperature of 103°, was prepared and injected into one of the veins of the forearm. Owing to the smallness of the vein, the solution did not flow well, and the patient, notwithstanding hypodermic injections of ether and whiskey, continued to sink rapidly. A second attempt at transfusion was made, the solution being injected into a vein of the left foot, and an almost immediate change in his condition was noticed. In the course of five or six hours the crisis had passed, and from that time on, his improvement was rapid and uninterrupted.

A Source of Error in Testing for Albumen in Icteric Urine.—Physiologists are familiar (*Brit. Med. Jour.—Drug. Cir.*) with the fact that if the urine from a case of jaundice be submitted to the ordinary tests for albumen, a precipitate will often occur which might be mistaken by an unskilled observer for one due to albumen. Professor Grocco (*Riv. Gen. Ital. di Clin. Med.*, July 20th, 1891,) has done well to call attention to this fact, as it is one which is usually entirely omitted from the text books, though it might easily mislead an unskilled observer.

The following is a brief summary of his remarks: (1) Certain icteric urines give with the ordinary tests for albumen, precipitates which resemble in many respects those due to albumen, even although this latter may be entirely absent; (2) such a urine may give, on warming and adding nitric or acetic acid, a flocculent precipitate, clearly organic in character, which disappears on adding excess of acid or of potash; (3) the precipitate may be produced by acetic acid even in the cold, or at a temperature far short of that required to cause precipitation of albumen; (4) very small quantities of mineral acids will also produce this precipitate; these do not give a precipitate with albumen; (5) the precipitate is soluble in alcohol, but not in chloroform or ether, neither does it yield the biuret reaction; (6) it is not composed either of nucleo-albumen, uric acid, or urates, and it occurs also in patients who are not under treatment by balsamic medicines; (7) the precipitate is said by Grocco to be composed of bile pigments, especially of biliverdin. [In this, however, he must be mistaken, as he states that it is not soluble in chloroform or ether, biliverdin being soluble at any rate in the former (Vogel). His statement that the precipitate is obtained in urines quite out of relation to their degree of pigmentation would also negative the view that the precipitate consisted of bile pigment. It is practically certain that such appearances are due to the precipitation of bile acids.] (8) When the above results are obtained, the author is inclined to think that the disease is grave, probably biliary calculus, acute yellow atrophy, carcinoma of the liver, or cirrhosis; (9) to test for the presence of albumen under these conditions, it will be best to treat the urine with $\frac{1}{10}$ or $\frac{1}{5}$ of its volume of strong acetic acid, leaving it in a cold place for some hours, then to filter off the precipitate which has formed, and to test the filtrate in the ordinary manner.

It would be well first to make quite certain, by the addition of a little more acid, whether precipitation of the bile acids was complete before applying further tests.

The Value of Vaccination.—In India where Brahmanical prejudice has ever stood in the way of sanitary progress, the mortality from small-pox has, until recent years, been appalling. Repeated attempts to introduce vaccination met with violent opposition from high-caste Hindoos, some of whom, however, allowed their daughters to be vaccinated just for experiment, girls being, according to their ideas, of not much value. As a result of this policy the girls escaped both death and disfiguration, while the boys were carried off by the thousands, seeing which the Brahmans relented and vaccination is gradually gaining favor, having been made compulsory in Calcutta in 1880, and in Madras in 1884, other cities and districts having fallen into line. The number of deaths from small-pox in Madras during the six years immediately preceding the enactment of compulsory vaccination, from 1879 to 1884 inclusive, was 9,809, a yearly average of 1,634.8, while during the six years following, from 1885 to 1890, there were only 190 deaths, or on an average 35 a year. In the unprotected period the smallest number of deaths (355) occurred in 1882, and the greatest (4,064) in 1884. In 1885, the death-rate fell to 26, and in 1886 there was *only one* death from small-pox. Surely these figures ought to convert the most rabid antivaccinist.

A Substitute for Quinine.—Among the great discoveries of the year in medicine and science will be recorded that of artificial quinine. Scientists have long sought to manufacture artificial quinine so that the medical profession need not depend upon the supply of the trees from which the drug is obtained for their important anti-fever medicine. Drs. Grimaux and Arnaud, of Paris, have succeeded in obtaining an artificial substance similar to quinine in its effects, and their method of making it is given as follows:

The base cuprein contained in the shrub *Remijia pedunculata* found growing in Brazil is treated with sodium, and then the combination thus obtained is treated with chloride of methyl.

The result of this combination is a drug that is identical

with the substance which we know as quinine. It has the same effect when given in fevers, and it will answer the same purpose as the natural product when applied for other purposes than reducing the temperature of patients. The result of this discovery, which has long been anticipated, will be the cheapening of the drug and the regulation of the prices during all seasons. The discovery, however, will lead to more important results in the way of enabling chemists to obtain analogous medicines of great value.

Rubber Cement.—To fasten glass letters, figures, etc., on glass (show windows) so that, even when submerged in water for several days, they will not become detached, use an india rubber cement. The best for this purpose consists of 1 part india rubber, 3 parts of mastic, and 50 parts of chloroform. Let stand for several days at a low temperature to dissolve the cement. It must be applied very rapidly, as it becomes thick very soon.—*Sci. Amer.*

Quill Drainage Tubes.—Dr. Newell (*Medical Record*) states that Dr. Beach is using for drainage large-sized goose-quills, perforated at intervals and preserved in sublimate or carbolic acid solutions; they are said to be unirritating.

Relation of Albuminuria to Puerperal Eclampsia.—According to the experience of Dr. W. S. Gardner, of Baltimore: (1) the presence of albumen in the urine of a pregnant woman is not sufficient cause upon which to base a prognosis of probable eclampsia; (2) the failure to find albumen in the urine of the pregnant woman is no evidence of its absence, or at least of the continuance of the absence of the condition that gives rise to puerperal convulsions; (3) albumen is so frequently found in considerable quantities in the urine of patients immediately after the appearance of puerperal convulsions, that we are justified in making the statement that the convulsions are the probable cause of albuminuria.

A Means of Preventing Cocaine Intoxication.—Parker (*Brit. Med. Jour.* and *D. Med. Zeit.*, July 6, 1891) has discovered that the unpleasant or even poisonous symptoms which occasionally follow the local application of strong solutions of cocaine in the nasal and buccal cavities may be entirely prevented by combining the drug with resorcin. This combination is also of advantage in utilizing the antiseptic, astringent and hemostatic properties of the latter drug; the solution may also be employed in post-nasal catarrh, pharyngitis, hypertrophy of the tonsils, stomatitis and gingivitis.

The Prevention of Lead-Poisoning.—M. Lavrand, according to the *English Druggist*, February, 1891, has found that the administration of pills of iodide of iron, either alone or with phosphide of zinc, is an efficient remedy to prevent or arrest lead-poisoning in those who work in white lead. The author found that although his patients continued to work in positions where they were likely to suffer, they improved in general health. The peculiar earthy complexion and anemia characteristic of saturnism disappeared under their use, and the amount of hemoglobin increased.

Belladonna in Early Stages of Labor (M. Asher, *Australasian Med. Gazette*).—A discussion reported in a recent number of an English journal upon the management of the early stages of labor has suggested to me the possible advantages of advising the use of a drug which, in my practice, has been of immeasurable benefit, saving considerable pain to the patient and materially diminishing the expected period of the labor. In primiparæ especially we often find, after a prolonged period of "pains" of more or less intensity, that the os has not enlarged beyond the size of a shilling, with thin, sharp edges, and, although the pains are fairly rapid and apparently severe, the progress of dilatation, while not entirely suspended, is excessively slow. With this condition, the inexperience of primiparæ helps to induce a form of general irritability, tending to still further delay and distress, and perhaps ultimately to complete inertia. On recognizing the earliest stages of this condition, as well as the more intense one of a completely rigid os, where, with extreme contractions, no dilatation whatever occurs, I have given large doses of belladonna with marked and in some cases most startling effect. Dr. Playfair, in the discussion referred to, commends the use of chloral in cases similar to those above briefly described, but, apart from the marked tendency to vomiting engendered by the chloral, in my hands the belladonna has acted more decisively and effectually. Within the last three years I have invariably used it in any case which suggested a prolonged first stage, with a consistent result—a decrease of pain and an increase in the rapidity of dilatation. The dose usually given was either twenty or thirty minims of a reliable officinal tincture every hour, or oftener. I can not recollect having to give more than three doses, satisfactory dilatation usually following the first or second draught. Belladonna is retained more readily than either chloral or opium, and although it was taught that vomiting had a tendency to relax rigidity—presumably by reflex action through the sympathetic apparatus—the fatigue caused by this unpleasantly depressing operation more than compensates for any possible benefit. I would strongly advise any one who should try this special use of belladonna not to give less than twenty minims; a smaller quantity would be unsatisfactory.

A Curious Property of Sulphur.—In demonstrating that sulphur, melted at about 115°, can be cooled in paper, the author happened to use a lithographed card of which the edges were turned up. Upon taking away the card he discovered that the lithographed characters were clearly and distinctly impressed upon the cooled surface of the sulphur, and remained after hard friction and washing. By repeated experiments he has been able to get very fine results, removing the paper each time by a mere washing and rubbing process. He finds that sulphur will receive impressions from and reproduce faithfully characters and designs in ordinary graphite crayon, colored crayons, writing ink, typographical inks, china ink, lithographic inks (colored or uncolored), and others. He remarks, too, that it will reproduce with remarkable exactitude geographical maps.—M. Charles Lepierre, *Bull. Soc. Chim.*, 5, 308, and *J. Anal. Chem.*

Sodium Sozoidolate in Crural Ulcers and Burns.—Dr. Nitschmann has had good results in crural ulcers and burns with the application of the following:

℞ Sodii sozoiodolat.....gm. 4 (ʒ j)
Lanolin.....gm. 40 (ʒ j ½)

—*Allgemeine Med. Centr. Ztg.*, No. 17, 1891. F. H. P.

Iodoformized Vaseline in Burns.—Dr. J. Rottenberg, as physician to a Hungary foundry, has had opportunity to employ iodoformized vaseline during the last two years in over 600 cases of burns of various degrees in individuals varying from fifteen to sixty years of age. The burns, which were from molten iron, varied in severity from a slight erythema to deep destruction of the various parts of the body. In two cases they involved about a third of the surface of the body. He treats them as follows: The blisters are not removed, but punctured, and a silk-thread, soaked in a corrosive sublimate solution, is drawn through each one and allowed to remain. Then the entire burnt sur-

face, however slightly or severely burnt, whether there are blisters, erythema, bare corium, or charred skin, is covered with a layer of iodoformized vaseline, ten per cent., of the thickness of a knife-blade and over this a piece of oiled-silk or gutta-percha paper. The salve is applied once a day. Under this treatment he has seen the terrific pains disappear as if by magic. In no case did he have any cicatrices to contract and deform which are so frequent with the usual methods of treatment, a smooth surface always resulted and only exceptionally was there profuse suppuration. Healing took place in general quite rapidly, although the workmen were often in very poor quarters.—*Ugeskrift for Læger*, Nos. 34, 35, 1891. F. H. P.

Hyperemesis Gravidarum Treated Successfully with Creosote.—Dr. Kaatzer treated a severe case of hyperemesis gravidarum in a young woman with threatening pulmonary tuberculosis with success. He used the following formula:

℞ Creosot-purissim. e fago....gm. 2 (rg. xv.)
Spir. vin. rectificat.....gm. 30 (fl. ℥ j)
Tinct. gentianæ.....
Extr. coffeæ.....āā gm. 10 (fl. ijss)
Aq. destill.....gm. 100 (fl. ℥ iijss)

Shake well before using.

A teaspoonful two to three times daily in milk.—*Ugeskrift for Læger*, Nos. 16, 17, 1891. F. H. P.

Arsenic in Warts.—Dr. P. Müller uses one to six drops daily of Fowler's solution in warts. An alcoholic solution of iodine has also been recommended for the same purpose in doses of ten drops two times daily. He has employed the liquor arsenitis kalici in a large number of cases of warts in both adults and children. He uses it in increasing doses, beginning with two drops three times a day in adults and one-half a drop three times daily in children. The warts decrease in size and fall off, so that in the course of two to three weeks the skin has a normal appearance. He has never seen warts recur after a "course" of Fowler's solution.—*Ugeskrift for Læger*, No. 39, 1891.

F. H. P.

Lithia Water in Renal Calculus.—Dr. J. J. Maxfield reports (*The Prescription*) an interesting case of stone in the bladder, treated with Buffalo Lithia Water.

A quart of Buffalo Lithia was drank each day, and the bladder irrigated once a day with warm lithia water. During the treatment large quantities of débris came away.

Dr. Maxfield says: "Had I known before I operated what I knew afterward, I would not have done it, but with a lithrotite I would have crushed it and washed it out, though I believe firmly that if I had continued the treatment of the Buffalo Lithia Water a few weeks more the stone would have fallen to pieces. The outer segments were roughened showing the disintegrating action of the water in dissolving it. I believe the case is unique in every particular and shows the value of Buffalo Lithia Water so clearly that I thought it worth repeating. The patient made a complete recovery without an accident to mar it. The total weight of the pieces saved was 213 grains.

Revulsive Medication.—Dr. Hubbard M. Smith writes in the *Therapeutic Gazette*, May 15, 1891, as follows: For many years I have successfully treated inflammations of the internal organs with the free use of mustard as a prime auxiliary, and the benefit following its application is so universally appreciable that to my mind doubt is out of the question.

In catarrhal troubles with children, especially of the chest, I have found counter-irritants a sheet-anchor in the first stage of the disease. The assertion of the opponents of this course, that they are "useless," even "injurious," and "augmenting fever and suffering," is purely imaginative and bordering on a sickly sentimentality. Often have I been called to the bedside of little sufferers with congestion of the lungs, evidencing pain at each respiration, which was short, with great restlessness and fever, when they have been soothed to a sweet sleep in half an hour or less by a jacket of mustard cloth, often sinking to sleep while the mustard was on them. To say that such treatment was cruel, useless, and calculated to augment fever is to assert that which experience demonstrated not to be true. Two years ago I was called to see a brother physician who was suffering greatly from pneumonia and enlarged liver, and he had obtained no rest or relief. I ordered a mustard plaster large enough to envelop chest and extend partly over the abdomen. He said afterward that the treatment was a revelation to him; its influence was so prompt and marked that he abandoned his theories about rubefacients and blisters for substantial facts. One trouble with the profession, as well as the laity, in the use of these agents is that they are too sparing with them. To be of material benefit, large plasters must be used, and for effect, not merely pretence in a routine way. When the child is very young, and I have occasion to use mustard, I order two tablespoonfuls of the strongest mustard (ground) to a pint of boiling water, and then have a cloth, sufficiently large to envelop the whole chest, dipped in this and wrung out so as not to drip when it is wrapped around the child, and a warm, dry cloth is placed over; better if a rubber cloth or oiled silk is used. This application is repeated soon again, unless the surface is very red; and when the redness begins to fade the application is repeated. In many cases the congestion never passes into inflammation under this treatment, and soon the patient is convalescent. If this plan be pursued early and rigorously, blistering seldom becomes necessary. But in adults, even when the inflammation was passing through its stages, when the patient's case seemed in a balance, and when suffering was acute, I have witnessed quick and permanent relief from a large blister, followed by an emollient poultice.

This is a part of my testimony in favor of rubefacients and blisters, after nearly fifty years' experience.

Salicin in Influenza.—Dr. E. B. Turner records (*Lancet*, July 18th, page 121) the results of treating two hundred cases of influenza with salicin. He states that, given in doses of twenty grains every hour at first, it will in the course of a few hours reduce the temperature to the normal condition, and convalescence is established as a rule in twenty-four hours. He also considers that it reduces the infectiousness of the disease. The sooner the remedy can be given after the first onset of the symptoms the sooner do the symptoms abate; and, if a case is treated at once after the first shiver, a normal temperature and freedom from pain are insured in about six hours. In the whole series of cases treated by Dr. Turner, no complication, such as bronchitis or pneumonia, occurred.—*Am. Drug.*

Eye Troubles in Pregnancy.—As the conclusion from a very interesting paper on the "Induction of Premature Labor, in Amaurosis and Amblyopia in Pregnancy" (*Jour. Am. Med. Assoc.*) Dr. Pooley says:

1. In all cases of pregnancy, not only should examinations of the urine be systematically made, but the eyes should be examined with the ophthalmoscope; since, in a large proportion of cases, where eye troubles exist, the patients make no complaint of disorders of vision. Frequently such troubles can be detected with the ophthalmoscope long before any disease of the kidney is shown in the urine.

2. In uremic amaurosis, without changes in the eye visible to the ophthalmoscope, even should the usual accompanying symptoms, such as dizziness, nausea and threat-

ened convulsions be absent, their supervention is soon to be anticipated, and the immediate induction of premature labor is indicated, without waiting until the life as well as the sight of the patient is in danger.

3. In neuro-retinitis the induction of premature labor is not only justifiable but urgently demanded. In some instances it is called for even in the earlier months of pregnancy.

4. It is required in cases of eye trouble recurring in successive pregnancies.

5. A woman having once suffered in this way during pregnancy, the relationship of cause and effect should be fully explained, both to herself and her husband.

When it is Good to be at Home.—"Well, Maggie," asked a teacher of a little girl, "how is it you are so late this morning to school?"

"Please, sir," was the reply, "there wis a wee bairn cam' to oor hoose this mornin'."

"Ah!" said the teacher, with a smile; "and wasn't your father very pleased with the new baby?"

"No, sir; my father's awa' in Edinburgh, and dinna ken aboot it yet; but it was a guid thing my mither wis at hame; for gin she had been awa', I wadna hae kent what to dae wi' it."—*Sanitarian.*

Albuminuria Caused by Antipyrin.—The following case is reported in the *Va. Med. Monthly*, May, 1891: A gentleman from New York came to Dr. Wm. A. Hammond's sanitarium for diseases of the nervous system with locomotor ataxia. His urine was so heavily loaded with albumin that it almost solidified on boiling. There was so much edema of the lower extremities that he could hardly put on his shoes; there was also considerable puffiness under the lower eye-lids. It was found that he had been taking for some time, nearly every night, large doses of antipyrin—often as much as sixty grains a night. This would always stop the ataxic pains. On examining his urine, much albumin was found in the morning and very little or none in the evening discharge. This led to the suspicion that antipyrin caused it. The drug was stopped, and since then the albumin has disappeared and the edema is much less.

A Method for Removing Tattoo Marks.—Variot (*Jour. de Méd. et de Chirurg. Prat.*, January 10, 1891) details the procedure which he adopts for the removal of these disfigurements. The skin to be decolorized is first washed with a concentrated solution of tannic acid, and is then closely punctured with a set of needles, such as tattooers use. A crayon of nitrate of silver is next thoroughly rubbed over the area, and after a moment the skin is dried off, when it will be found that the punctures are deeply blackened by the formation of the tannate of silver in the superficial layers of the skin. The cauterization is said to result in an inflammatory reaction for a couple of days, and subsequently in the formation of a crust or thin eschar, which separates spontaneously in from fourteen to eighteen days, leaving beneath it a superficial red cicatrix, which gradually loses its color, and at the end of a few months is scarcely perceptible. The only dressing employed after the little operation consists in keeping the parts powdered with tannin.

Effects of Dynamite Explosions and of Nitro-Glycerine (Dr. Thomas Darlington, *Med. Record*, December 13, 1890).—In the construction of any work of magnitude, in the present day, involving the removal of rock, dynamite or nitro-glycerine is used in considerable quantities.

When these are used in open cut-work, as on railroads, after the explosion the gases immediately distribute themselves in the atmospheric air, and no effect has been noticed on the workmen employed.

But where it is used in tunnels, as in mining or other partially closed cavities, and the gases or residue are slow to escape from the mouths of the tunnel, or up an air-shaft, serious deleterious effects are produced.

Dynamite is composed of nitro-glycerine with some absorbent. The similarity of symptoms from inhalation of the products of the explosion of dynamite, and of those produced by the nitro-glycerine itself, is so well marked that even miners themselves have noticed it. No other conclusion can well be reached than the fact that there is mixed with the gases produced unexploded particles of nitro-glycerine in a volatile state; and these particles inhaled by the miners produce the effects described.

As regards treatment—as a preventive the use of such apparatus or machinery, whether by blowing or by sucking, that will rapidly clear the tunnel or cavity from noxious gases or fumes is to be recommended. Also, it has been found by makers of dynamite that the use of a large cap will explode a greater percentage of the glonoine than a small one, and this, to a certain extent, obviates the trouble. Of course, such measures as are generally used in cases of asphyxia are of service, but, in addition to these, the use of cold to the head, and of atropine, ergotine, or other vaso-motor stimulants, administered subcutaneously, are of necessity indicated and exceedingly efficacious. There is little doubt that the effects of nitro-glycerine are produced from its decomposition and the formation of a nitrite in the body. Treatment with ammonia restores normal color and normal functional power to nitrite-poisoned blood.

Acting on this principle, and from its stimulant properties, I have uniformly treated my cases with inhalation of ammonia, and also given the carbonate and aromatic spirits of ammonia internally; and up to the present time have not lost a case.

It seems to me it would be well for those in charge of such works to recommend to the workmen to carry with them small vials of this remedy for use in similar cases.

Spermin in Surgical Practice.—Dr. Veliaminoff, of St. Petersburg, one of the foremost Russian surgeons, says (*Vratch*) that he resorted to spermin in four cases of grave and prolonged operations in extremely exhausted patients. The results of the injections (under the skin) were uniformly brilliant: (1) The patients bore the operations in an excellent way; (2) Notwithstanding very large amounts of chloroform used (in one case, in which the operation lasted two and a half hours, as many as six ounces of the anæsthetic were spent), the cardiac action left nothing to be desired; (3) The patients' state in the after-period remained reproachless all through.

Centrifugal Force Applied to the Examination of Physiological and Pathological Fluids.—This subject is treated by M. Litten, in a communication to the Berlin Society of Internal Medicine (*Semaine Med.*). Hitherto such examinations have been conducted by either allowing the liquids to settle or filtering them, after which the deposit, or the residuum remaining on the filter, as the case may be, is placed under the microscope. To a Swedish physician, M. Torn Steenbeck, belongs the credit of having first employed the diffusion process in order to separate their contained particles. He has constructed a small apparatus on this principle which thoroughly clarifies any liquid, the sediment being left in a reservoir, whence it may be drawn for microscopic examination; in this way it is almost impossible that a single renal cylinder, for example, should escape observation. An expert in this method is able, even with the naked eye, to distinguish between pus, blood, and crystalline formations, and to de-

tect the presence of bacilli in the urine or any other bodily fluid, also that of albumen, and even in a few minutes to estimate the quantity of the latter. When a specimen of urine contains blood, he can determine whether this is owing to hematuria or hemoglobinuria (in the former case the urine becomes clear on standing, and deposits red corpuscles, while in hemoglobinuria it retains its color).

It has been shown by the use of this apparatus that normal urine, in almost every case, contains cylinders, blood globules, and oxalate of lime.

Care should be taken, as M. Litten points out, to place urine in the machine immediately after drawing it from the bladder, which should be done with an aseptic catheter.

Cocaine in Urethral Surgery.—Dr. Frank W. Glenn, in *South Pract.*, relates three experiences he has had in the treatment of stricture, which will cause him to be very careful in the use of cocaine on absorptive surfaces. From these cases he draws the following conclusions:

1. Cocaine is a most potent and wonderful local anodyne, but not void of danger.

2. Its use should be positively forbidden in the recently cut or denuded urethra.

3. Prepared after the manner of Glueck with phenol, it is equally unsafe to apply to the abraded urethra.

4. The use of cocaine in the urethra is attended with more risk than when applied to any other part of the body.

Elongation of the Uvula as a Cause of Laryngismus.—Lennox Browne, in *British Med. Journal:* When the faucial tonsils are not enlarged, elongation of the uvula in young children is due to paresis of the soft palate. This, in turn, is almost invariably due to enlargement of the pharyngeal tonsil, otherwise known as adenoid growths. In almost every case of laryngismus, as well as in those of tetany and convulsions, the patient is a mouth-breather, and, if sought for, adenoid growths will be found. The author has rarely been obliged to excise the uvula of a child for removal of enlarged tonsils, whether faucial or pharyngeal, will, in most cases, lead to restoration of the muscular contractility of the soft palate.

The Barring Out of Foreign Diplomas by the Illinois State Board of Health.—This action was taken because: 1. The diplomas of medical schools and universities do not entitle the holders to practice in these countries. 2. The Prussian Staats-Examen Commission rejected in 1890 more than 40 per cent. of the graduates of the University of Berlin, more than 47 per cent. of the Breslau graduates, more than 31 per cent. of the Griefswald and Halle graduates—and, in fact, more than 29 per cent. of the university graduates that came before the commission. 3. Many of the rejected candidates come to this country. 4. Many such graduates, fearful of failing in the government examinations in their own countries, come to this country to enjoy a privilege denied them at home of practicing medicine simply on their diplomas. 5. The Illinois State Board of Health feels that it should not place upon such diplomas a higher valuation than is given them in the countries in which they are granted.

Immunity of Jews from Tuberculosis.—Dr. G. A. Heron has just published a work on "Evidences of the Comm u nicability of Consumption" (Longmans). He dwells upon the immunity from tuberculosis of carefully conforming Jews, whose meat is inspected in a manner which would require the rejection of the entire carcass, if any speck of tubercle were discovered. Dr. Heron believes about four per cent. of the animals slaughtered for food in Great Britain are more or less affected by tuberculosis. He admits that there is probably no room for doubting that a complete sacrifice of the infected animals, such as would be required by the law and practice of the Jews, or even in some Gentile communities in which an inspection of meat is rigidly enforced, would become, by the diminution of disease which it would bring about, a distinct source of saving to the public.

The Treatment of Cold Abscesses.—The treatment of cold abscesses by the antiseptic puncture is advocated by Piechaud (*Le Bull. Médicale*, April 8, 1891). The results of this simple procedure have been entirely satisfactory, no complications having followed the cures accomplished. The size of the abscesses treated has been variable, but the largest collections were met in the thigh and buttocks of children. The liquid of some of these abscesses showed, under the microscope, the presence of the streptococcus and the staphylococcus.

Twenty cases were treated as follows: After the puncture washing of the sac was ordered, and then the application of a solution of corrosive sublimate (1 to 1,000) was made. This method usually brought about a very rapid cure, even in cases where the skin had become so thin as to threaten a rupture of the abscess. The author never observed untoward effects following the use of the mercurial solution employed.

The Time When Children are Born.—Dr. A. A. Hamilton reports, in the *Indiana Medical Journal* for April, 1891, one hundred consecutive cases of childbirth in which the exact time of delivery was noted. From this he found that exactly fifty of the children, or one-half of the entire number, were born during the daytime, or between six o'clock in the morning and six o'clock in the evening.

The Evils of Public Hypnotization.—Dr. Surbled reports the following case in the *Journal des Sciences Med. de Lille* for May, 1891: On the occasion of a public exhibition of hypnotism, an intelligent man, aged fifty-two, of healthy antecedents, was profoundly impressed with what he had seen, and continued to talk of the wonders of animal magnetism for days after the performance. Soon, however, he began to act rather queerly, and in about two weeks became actually maniacal, and died shortly after of encephalitis. During his delirium all his thoughts were of hypnotism, and he was continually making passes, as if he had subjects before him. Dr. Surbled regarded his death as the direct result of the impression made upon an excitable brain by the public hypnotic performance.

A Splendid Record.—Mr. Wm. H. Wiley, president of the St. John's Guild, said in his annual address that during the twenty-five years of the existence of the Guild, it had cared for in the Floating Hospital and the Seaside Hospital at Staten Island 456,135 sick children and their mothers. Many of the children by the timely care given by this noble charity were saved from death.

For the Prevention of Baldness.—It is recommended (*Med. Record*) for the prevention of baldness that the hair be kept pretty closely cropped, and that the head be bathed frequently in salt water and lubricated occasionally with a very small quantity of vaseline. About two teaspoonfuls of salt to a pint of water will make a tonic of the proper strength, and with this the head should be bathed at least three times a week.

Castor Oil as a Menstruum for Cocaine.—To lessen the irritation caused by a cicatrix rubbing over a corneal ulcer, Dr. S. Mitchell, in *Boston Med. and Surg. Jour.*, says he employed a solution of cocaine in castor oil; this relieved the pain and permitted the ulcer to heal after other solutions had been tried in vain.

MISCELLANY.

—Miss Christie, who was graduated recently from the Glasgow University as M. B., was the first woman educated in the Glasgow Medical School.

—A prominent gynecologist in Germany was recently found liable for $1,600 damages, besides being condemned to pay a fine of $100, for having published clinical notes of some of his cases in a gynecological treatise. His fault consisted in publishing the names of his patients in conjunction with the clinical accounts.

—Dr. G. W. Wells, of this city, is to issue a journal known as the *Medical Examiner*. It will be devoted to medical matters connected with life, accident, and marine insurance, the army, navy, police, fire department, pension service, railways, etc. From its announcement it should prove a success.

—The *Medical News* says the records of Yale College during the past eight years show that the non-smokers are twenty per cent. taller than the smokers, twenty-five per cent. heavier, and had sixty-six per cent. more lung capacity. In the last graduating class at Amherst College, the non-smokers have gained in weight twenty-four per cent. over the smokers; in height, thirty-seven per cent.; in chest girth, forty-two per cent.; and in lung capacity, eight and thirty-six hundredths cubic inches.

—An exploratory operation for brain tumor killed the late Mr. W. H. Gladstone.

—Mr. Jonathan Hutchinson says that life insurance companies should not take as risks persons suffering from active secondary symptoms.

—At the Island of St. Kilda, in the west Hebrides, almost every child born dies of tetanus neanatorum. There is no physician on the island.

—Any physician offering for practice in Georgia (according to a recent legislative enactment), on being proven to drink to excess, is hereafter to be deemed disqualified to practice his profession in that State.

Hypnotism and crime seem to be becoming closely united, as in at least a dozen recent criminal cases the defendants have claimed to have acted under hypnotic influence.

—A recently enacted law in Ohio says: "Physicians in the discharge of professional duties shall be permitted to ride, at their own risk, upon freight trains between stations where such trains stop, paying therefor the regular passenger fare." Such a law would be useful in every State, as physicians often lose much valuable time waiting for a passenger train when a freight train could just as well be utilized.

—Dr. P. N. Parnowskaja, a Russian female medical practitioner, has been awarded a gold medal by the Moscow Society of the friends of natural science, anthropology and ethnography, for her work on "Anthropology of Prostitutes and Female Thieves."

—Says a correspondent of the *Therapeutic Gazette*: Possibly it is not known universally in America that the German physician is absolutely unprotected by the Government since the introduction of gewerbefreiheit (*i. e.*, trade-freedom, meaning liberty to carry on any trade or profession whatever). The government prosecutes all those carrying the title of "doctor" or "physician" illegally, but allows every barber or huckster to practise medicine.

—In a paper on sexual perversion, Dr. Kiernan, the author, stated that a New York male physician with a large practice always wore feminine dress.

—The development of new capabilities to meet new conditions is well illustrated by the asserted fact, that since the use of wire netting for fences in Australia, the rabbits have developed a new nail that enables them to climb the fences with neatness and despatch; while a similar newly developed appendage allows the animal to burrow under the netting, unless it is buried at least eight inches under the surface of the ground.

—It has been found that the serration of the edges of the cranial bones is produced by the continued pulsation to which the vault of the skull is subjected during the completion of the ossifying process.

—Dr. Bernheim, of Nancy, denies that antipyrine and other similar drugs, the salicylates, quinine, digitalis, etc., have any protracted effect as antipyretics. He claims that in rheumatic fever they are simply "articular analgesics," relieving pain, but without other effect upon the disease, its cause or sequelæ.

—Medical students in London have been compelled to go through a course of four years' study, hospital attendance and lectures, before being qualified to appear for the final examination. By an order of the Grand Medical Council of England, issued last month, the term of preparation has now been extended to five years.

—A prizè of one thousand francs ($200) is offered by the French Academy of Medicine for the best essay on the prophylaxis of syphilis during lactation. Theses in competition must be in the hands of the academy before the 1st of April, 1892.

—Dr. Virginia T. Smith says: "From personal experience I know the use of vinegar to be most excellent as an antidote for overdose of aconite.

—The next meeting of the Medical Society of the State of New York, will be held at Albany, February 2d, 3d and 4th, 1892. Any communications regarding papers or any matter pertaining to the business of the society, which should properly come before the Business Committee, should be addressed to Dr. Seneca D. Powell, 12 West 40th street, New York City.

—Dr. Geo. Taylor Stewart, chief of staff, reports 709 patients treated at the Ward's Island Hospital during October, with a death rate of 2.54 per cent. For the ten months ending October 31st, 4,250 patients were treated, with a death rate of 5.25 per cent

—Dr. Gilbert I. Cullen says, the main indications for reduction of tonsils by galvano-cautery might be summarized as follows:

1. When tonsils have ceased to perform their function by reason of interstitial thickening and occlusion of the lacunæ of the glands, in which condition the mouths of the crypts becoming blocked with the accummulations of sebaceous matter, which rapidly decomposes, they form an excellent culture medium for various pathogenic germs which may ultimately be absorbed into the lymphatic system.
2. That when a tonsil shows itself competent at short intervals to become inflamed and give rise to peritonsillar abscess.
3. Where the tonsil is so situated that it is a matter of great difficulty as well as danger to use the tonsillotome, and from extensive adhesion of the pillars, likely to cause severe hemorrhage by their being cut.
4. In all cases where the patient is of a hemorrhagic diathesis or in other cases in which alarming hemorrhage is feared.
5. Where patients will not consent to the use of the knife and yet the demand for the removal of the gland is imperative.